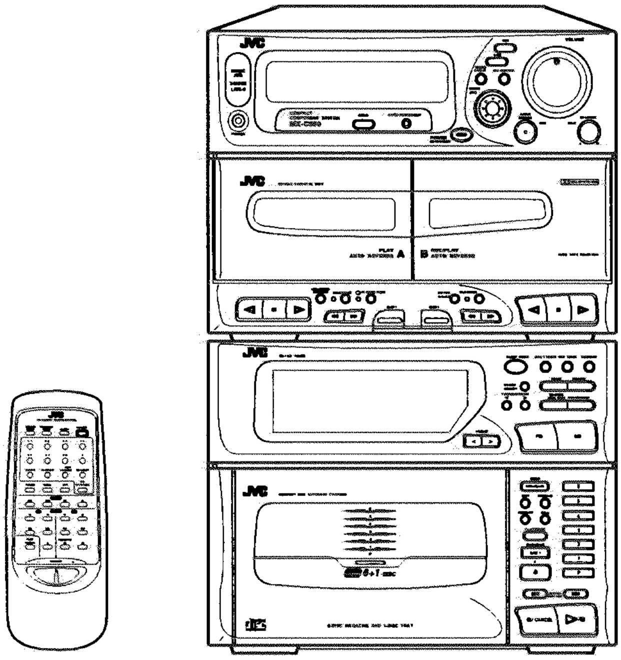
JVC

SERVICE MANUAL

COMPACT COMPONENT SYSTEM

CA-C550

Pick up	OPTIMA-6
CD signal processor	MN662720RB



Area Suffix

C	Canada
J	the U.S.A.
US	Singapore
UT	Taiwan
U	Other Area

COMPACT
disc
DIGITAL AUDIO

DX--C550 is needed for power supply when servicing the not provided with the power (mains)cord.

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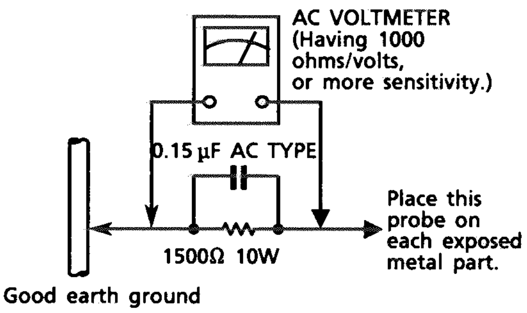
No. 20512
Mar. 1995

Safety Precautions

1. The design of this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Services should be performed by qualified personnel only.
2. Alterations of the design or circuitry of the product should not be made. Any design alterations of the product should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacture of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the Parts List of Service Manual. Electrical components having such features are identified by shading on the schematics and by (⚠) on the Parts List in the Service Manual. The use of a substitute repalcement which does not have the same safety characteristics as the recommended replacement parts shown in the Parts List of Service Manual may create shock, fire, or other hazards.
4. The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after re-assembling.
5. Leakage currnet check (Electrical shock hazard testing)
   After re-assembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, contorl shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.
   Do not use a line isolation transformer during this check.
   - Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal parts of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5mA AC (r.m.s.).
   - Alternate check method
     Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having, 1,000 ohms per volt or more sensitivity in the following manner. Connect a 1,500Ω 10 W resistor paralleled by a 0.15 µF AC-type capacitor between an exposed metal part and a known good earth ground.
     Measure the AC voltage across the resistor with the AC voltmeter.
     Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and meausre the AC voltage across the resistor.
     Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75 V AC (r.m.s.).
     This corresponds to 0.5 mA AC (r.m.s.).



Warning

1. This equipment has been designed and manufactured to meet international safety standards.
2. It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
3. Repairs must be made in accordance with the relevant safety standards.
4. It is essential that safety critical components are replaced by approved parts.
5. If mains voltage selector is provided, check setting for local voltage.

Important for Laser Products

1. CLASS 1 LASER PRODUCT
2. DANGER : Invisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.
3. CAUTION : There are no serviceable parts inside the Laser Unit. Do not disassemble the Laser Unit. Replace the complete Laser Unit if it malfunctions.
4. CAUTION : The compact disc player uses invisible laser radiation and is equipped with safety switches which prevent emission of radiation when the drawer is open and the safety interlocks have failed or are defeated. It is dangerous to defeat the safety switches.
5. CAUTION : If safety switches malfunction, the laser is able to function.
6. CAUTION : Use of controls, adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

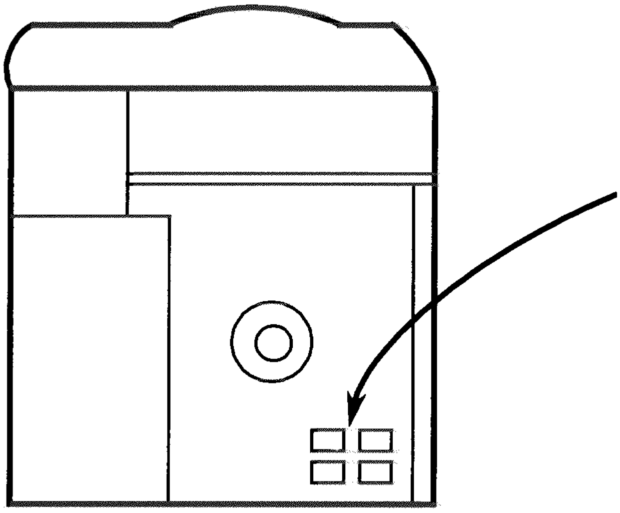
VARNING : Osynlig laserstrålning när denna del är öppnad och spärren är urkopplad. Betrakta ej strålen.

VARO : Avattaessa ja suojalukitus ohitettaessa olet alttiina näkymättömälle lasersäteilylle. Älä katso säteeseen.

ADVARSEL : Usynlig laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

ADVARSEL : Usynlig laserstråling ved åpning, når sikkerhetsbryteren er avslott. unngå utsettelse for stråling.

REPRODUCTION AND POSITION OF LABELS



WARNING LABEL

(Except for the U. S. A.)

DANGER: invisible laser radiation when open and interlock failed or defeated. AVOID DIRECT EXPOSURE TO BEAM. (e)

VARNING: Osynling laserstråling när denna del ä öppnad och spärren är urkoppled. Betrakta ej stålen. (s)

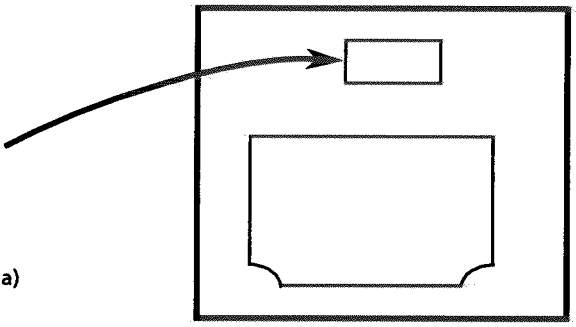
ADVARSEL: Usynling laserstråling ved åbning, når sikkerhedsafbrydere er ude at funktion. Undgåudsættelse for stråling. (d)

VARO: Avattaessa ja suojalukitus ohitettaessa olet alttiina näkymättömälle lasersäteilylle. Älä katso säteeseen. (f)

CLASS 1
LASER PRODUCT

CLASSIFICATION LABEL

(Except for the U. S. A. and Canada)



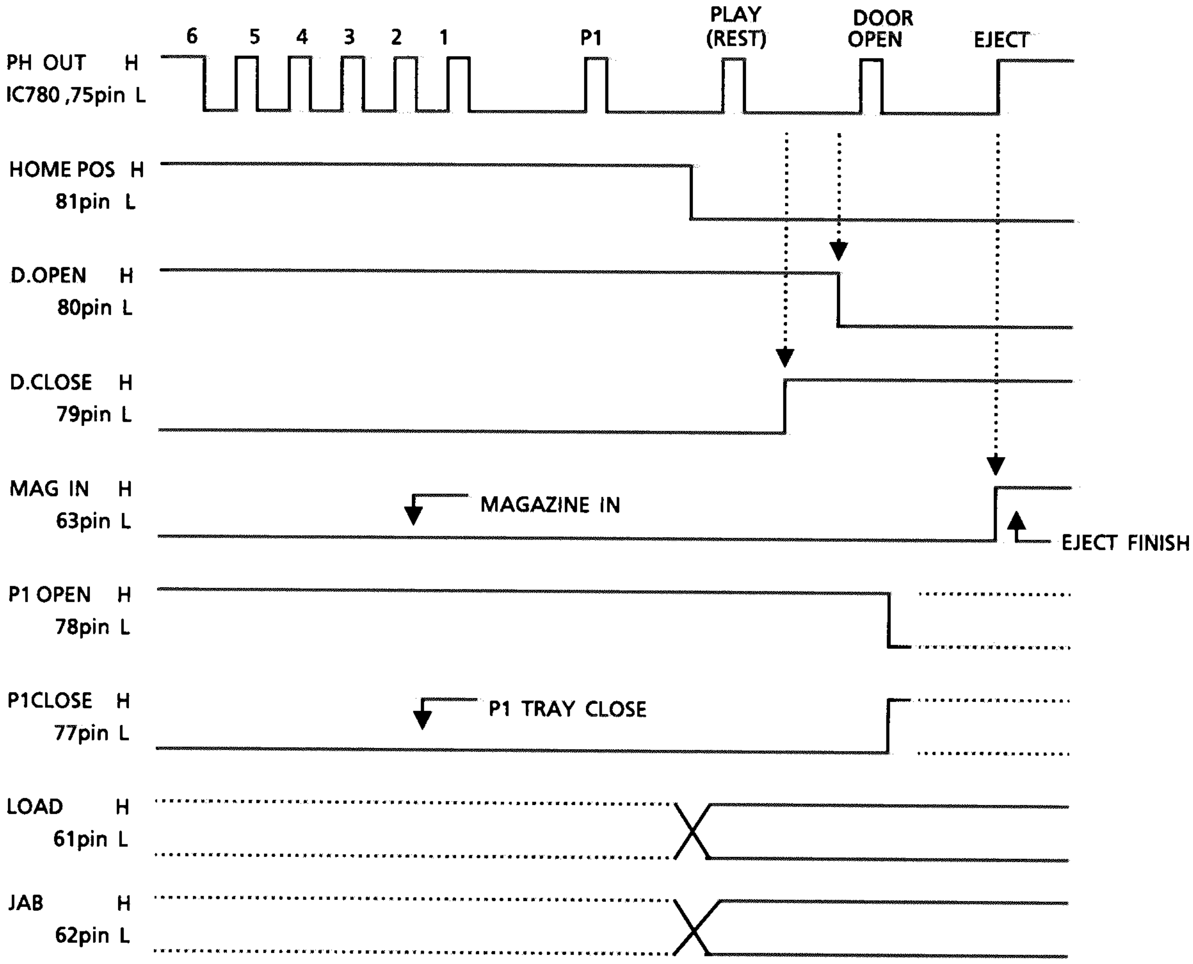
■ CHANGER MECH. (ELM-C600) Technical Explanation

ELM-C600 has been simplified as keeping functions which current changer mech.s have so that every units can be easily assembled.
The followings show its operational specifications.

1. Basic operation

① Execute JAB(UNLOAD) after turning the power on.
② The elevator should be at PLAY(rest) position when P1 tray is opened or closed.
③ The elevator should be at PLAY(rest) position when magazine is ejected.
④ The tray should be returned to magazine when the tray is loaded from the magazine.
⑤ The Plus-1 tray is opned after returning a disc if the P1 OPEN button is processed while the tray is being loaded.
⑥ Photo interrupter only detects lift cam position (includes PLAY position).
⑦ For "HOME POS'SW", signal is read in case of retrying and mech. initializing.
⑧ Signal is read twice every 5 msec. to judge switch's on and off.
⑨ It takes 50 msec. after finishing one operation to start next one (switching motor rotation).
⑩ The door is closed once and opned again if a disc on the P-1 tray is reproduced without taking a magazine out though it is ejected.

(1) Timing for each switches


6
5
4
3
2
1
P1
PLAY (REST)
DOOR OPEN
EJECT
PH OUT H
IC780 ,75pin L
HOME POS H
81pin L
D.OPEN H
80pin L
D.CLOSE H
79pin L
MAG IN H
63pin L
MAGAZINE IN
EJECT FINISH
P1 OPEN H
78pin L
P1CLOSE H
77pin L
P1 TRAY CLOSE
LOAD H
61pin L
JAB H
62pin L

····· : Range which H.Motor can rotate.
(That is, the range which magazine can be loaded or unloaded or Plus-1 tray can be opned or closed.)

[NOTE] Door OPEN/CLOSE switch may sometimes follow the above chart because it is half linked. (Door is opened manually and the switch is linked to the door.)

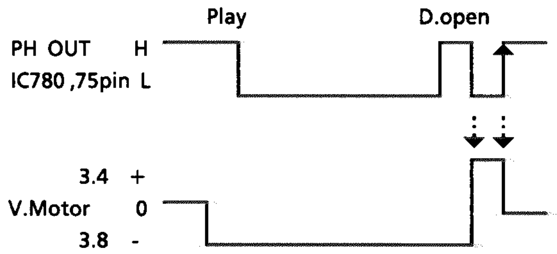
(2) Returning a disc in power failure

EEPROM memorizes step where the tray is pulled out it will be returned to its original step when power is supplied again.

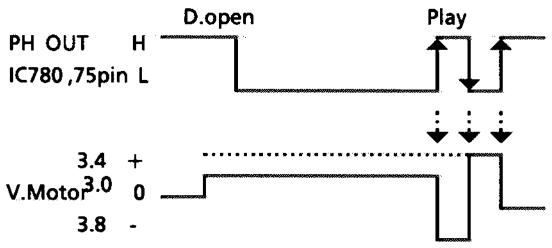
2. Moving lift cam

1) Signal of photo interrupter (PH OUT) is read twice every 5 msec..
2) Elevator is once lowered and start to rise to select a tray.
3) When the lift cam is moved, "PH OUT" is not detected during 50msec. which are set for masking.
   (The lift cam should stop within limited slit. The above masking prevent miscounting caused by the lift cam passing the limit.)
4) P1 tray is closed before changing elevator height when "HOME POS" switch is on.
5) Voltage is reduced only when the door is closed.

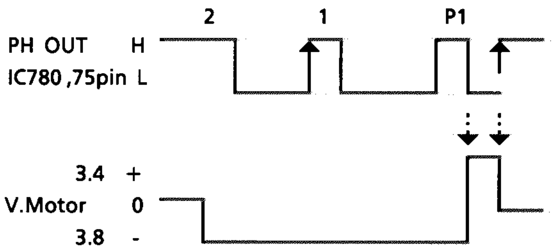
① Door open


Play
D.open
PH OUT H
IC780 ,75pin L
3.4 +
V.Motor 0
3.8 -

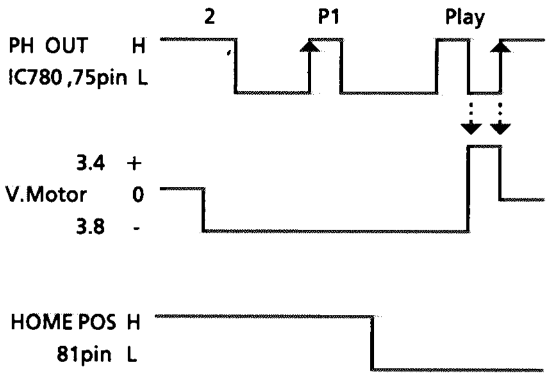
② Door close


D.open
Play
PH OUT H
IC780 ,75pin L
3.4 +
3.0
V.Motor 0
3.8 -

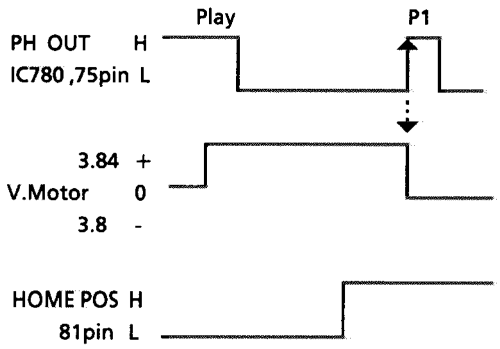
③ Elevator Down(DISC 2→P1)


2
1
P1
PH OUT H
IC780 ,75pin L
3.4 +
V.Motor 0
3.8 -

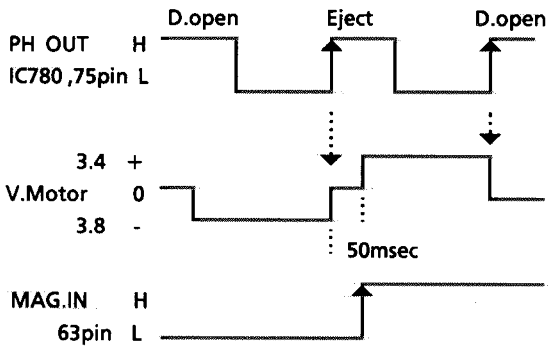
④ Elevator Down(DISC 2→P1)


2
P1
Play
PH OUT H
IC780 ,75pin L
3.4 +
V.Motor 0
3.8 -
HOME POS H
81pin L

⑤ Elevator Up(PLAY→P1)


Play
P1
PH OUT H
IC780 ,75pin L
3.84 +
V.Motor 0
3.8 -
HOME POS H
81pin L

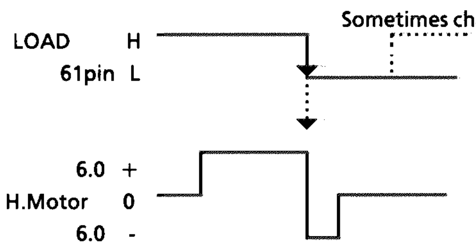
⑥ Eject


D.open
Eject
D.open
PH OUT H
IC780 ,75pin L
3.4 +
V.Motor 0
3.8 -
50msec
MAG.IN H
63pin L

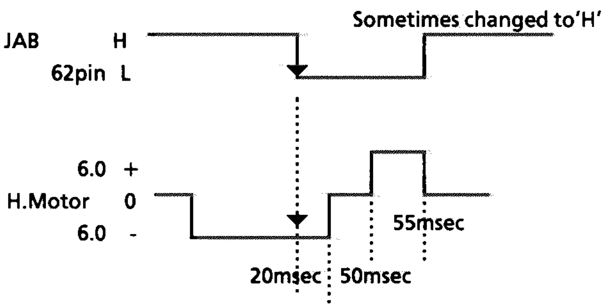
3. Tray LOAD/UNLOAD

1) The motor is rotated reversely for 20 msec. after LOAD switch is turned on.
2) The motor is rotated for 20 msec. in loading direction when "HOME SW" switch is off and "LOAD" switch is on after turning the power on.
3) JAB switch may sometimes be turned off after the operation.
4) LOAD switch may sometimes be turned off when the elevator is up to return a tray.

①Tray LOAD


Sometimes changed to'H'
LOAD H
61pin L
6.0 +
H.Motor 0
6.0 -

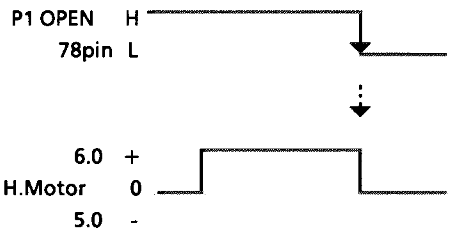
②Tray UNLOAD


Sometimes changed to'H'
JAB H
62pin L
6.0 +
H.Motor 0
6.0 -
55msec
20msec
50msec

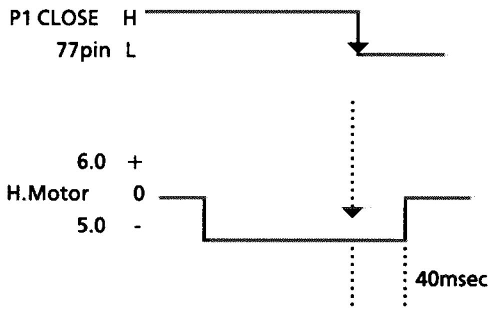
4. P-1 Tray OPEN/CLOSE

1) Closing the P-1 tray decrease voltage.
2) The tray starts the opening operation when 5 sec. timeout is finished after closing the tray.
3) The motor keeps its situation for 40 msec. after detecting P1 CLOSE switch on after closing the tray.

① P1 open


P1 OPEN H
78pin L
6.0 +
H.Motor 0
5.0 -

① P1 close


P1 CLOSE H
77pin L
6.0 +
H.Motor 0
5.0 -
40msec

5. Magazine eject

Magazine is ejected slower than the cam's movement. 'MAG. IN' switch is turned off a certain period later after the cam is moved to "EJECT" position.
For retrying, the cam is returned to DOOR OPEN position and starts ejecting.

6. Door OPEN/CLOSE

1) The door is opened before the operation of opening P-1 tray or ejecting magazine.
2) The door can be closed manually while it is being opened.

7. Mech. reset

The followings show modes for each witches while the mech. is reset (mech. initialization).

SW Name	Symble	SW Mode	IC780 Pin No	Out put (IC780)
P1 OPEN/CLOSE	S005	CLOSE side	77pin	L
LOAD/JAB	S003	NOT SELECTED	61/62pin	---
D.OPEN/CLOSE	S731	CLOSE側	79pin	L
HOME POS	S002	ON	81pin	L
PHOTO SENSER	PH001	ON	75pin	L

8. Retrying operation at time out.

Retrying operation starts after timeout processing if operation time exceeds previously set time due to abnormality during its operation.

1) TRAY LOAD/UNLOAD

① LOADING → TIME OUT (10sec) → UN LOAD(JAB OPERATION) → RESET

↓ TIME OUT → STOP

② UNLOADING→TIME OUT (10sec)→LOAD→Elev.Down(Checking H.posSW)→Elev.UP→UNLOAD→RESET

↓ TIME OUT, → STOP

2) ELEVATOR UP/DOWN

① UP OPERATION→ TIME OUT (10sec) → Elev.Down(Checking H.posSW)→ Elev.UP →RESET

↓ TIME OUT → STOP

② DOWN OPERATION→TIME OUT (10sec)→STOP

3) P1 OPEN/CLOSE

① OPEN OPERATION → TIME OUT (10sec) → STOP(Standby for next operation)

② CLOSE OPERATION → TIME OUT (5sec) → P1 OPEN → STOP(Standby for next operation)

↓ TIME OUT → STOP

4) DOOR OPEN/CLOSE

① OPEN OPERATION → TIME OUT (10sec) → STOP

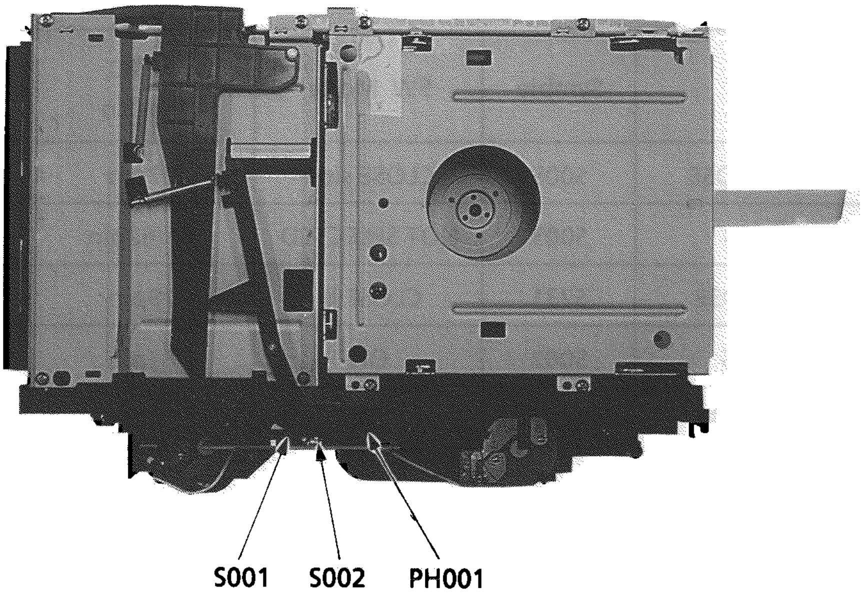
② CLOSE OPERATION→ TIME OUT (5sec) → a:Play operation is prior.

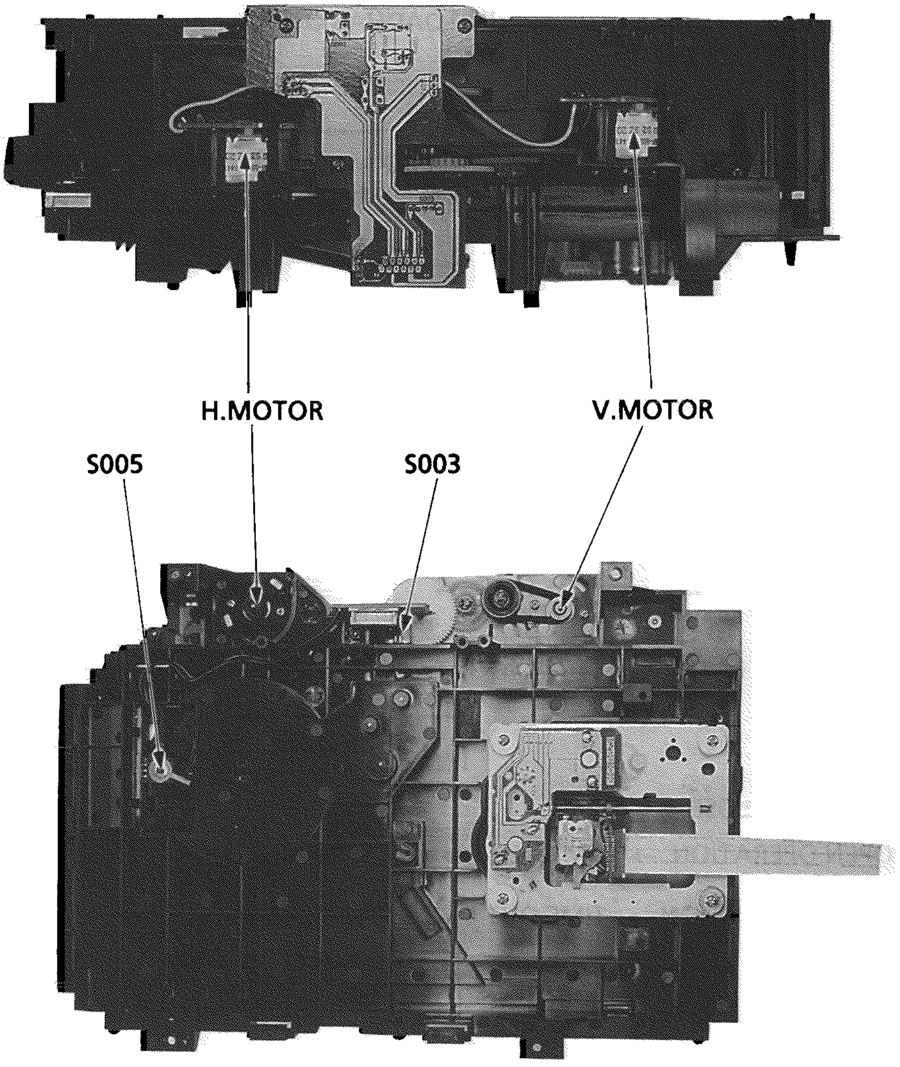
b:a Exsept for Open → STOP(Play operation is prior.)

5) EJECT

WITHOUT RETRAY

■ Position of switch and motor


S001
S002
PH001


H.MOTOR
V.MOTOR
S005
S003

Thank you for purchasing the JVC Compact Component Stereo System.
We hope it will be a valued addition to your home, giving you years of enjoyment.
Be sure to read this instruction manual carefully before operating your new stereo system.
Here you will find all the information you need to set up and use the system.
For questions that are not be answered in the manual, please contact your dealer.

Features

Great sound

Here are some of the things that make your CA-C550 powerful and easy to use.

☐ To get such great sound from such a compact package the CA-C550 has:
- Pre-programmed live surround effects like **D. CLUB (Dance Club), HALL, STADIUM** as well as SEA effects like **ROCK, POPS, CLASSIC** so you don't have to be a sound engineer to get great effects.

Easy operation

☐ The controls and operations have been redesigned to make them very easy to use so you can spend your time listening to music.
- With the One Touch Operation feature of JVC's **COMPUPLAY** you can turn on the CA-C550 and start the radio, the cassette deck, or the CD player with a single touch.
- The three timers, **REC (Recording) Timer, DAILY Timer**, and **SLEEP Timer** are extremely easy to set.
- The Displays are large and clear. They are organized so you can tell at a glance what's happening because functions light up as you use them, and blink to tell you they are ready. In this manual, the display on the amplifier is referred to as the amp display and that on the tuner as the CD/Tuner display. The CD/Tuner display gives you some important messages like "NO DISC", and some others.
- **Auto Edit** figures out how to arrange CD tracks on a tape. When you are recording a tape from a CD, the selections aren't cut off if the tape ends before the selection does.
- **Program Edit** allows you to arrange CD tracks on a tape in your desired order.

How This Manual Is Organized

In this manual we have incorporated some special features:
- Basic information that is the same for many different functions is grouped in one place, and not repeated in each procedure. For instance, in the section on playing a CD, we do not repeat the information about setting the volume and the sound conditioning, which are talked about in the Using the Amplifier section.
- Name of buttons and controls are written in all capital letters like this: POWER.
- When we are talking about the Function, rather than the BUTTON or DISPLAY, only the first letter is capitalized.
- The column on the left of the page is a special place to make it easier to find just what you want to know about, with little headlines announcing what each part of the page is about. Sometimes illustrations and helpful hints are placed here also.

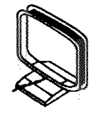
The manual has a table of contents to help you easily look up what you want to know.
We've enjoyed making this manual for you, and hope you will use it to enjoy the sound and many features built into your system.

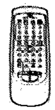
IMPORTANT CAUTIONS

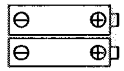
1. **Installation of the Unit**
   - Select a place which is level, dry and neither too hot nor too cold (Between 5°C and 35°C or 41°F - 95°F).
   - Leave sufficient distance between the Unit and your TV.
   - Do not use the Unit in a place subject to vibrations.
2. **Power cord**
   - Do not handle the power cord with wet hands!
   - A small amount of the power (12 watts) is always consumed as long as the power cord is connected to the wall outlet.
   - When unplugging from the wall outlet, always pull the plug, not the power cord.
3. **Malfunctions, etc.**
   - There are no user serviceable parts inside. If anything goes wrong, unplug the power cord and consult your dealer.
   - Do not insert any metallic object into the Unit.

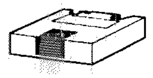
Getting Started

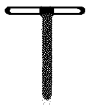
Check to be sure you have all of the following things, which are supplied with the system.

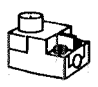

AM Loop Antenna

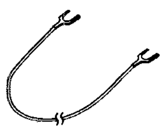

Remote Control


Batteries


Magazine


FM Feeder Antenna

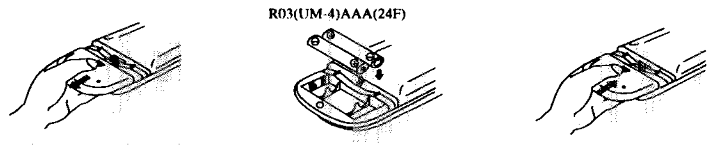

FM Antenna Adaptor


External Wire

If any are missing, contact your dealer immediately.

How to Put Batteries in the Remote Control

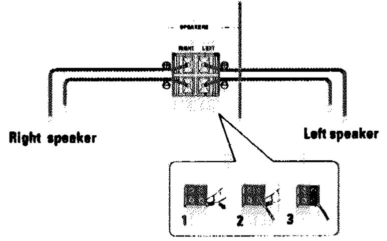
Match the polarity (+ and –) on the batteries with the + and – markings in the battery compartment.



CAUTION: Observe Proper Handling of Batteries.
To avoid battery leakage or explosion:
- Remove batteries when the Remote Control will not be used for a long time.
- When you need to replace the batteries, replace both batteries at the same time with new ones.
- Don't use an old battery with a new one.
- Don't use different types of batteries together.

Connecting the Speakers *(Please refer to instructions for speakers as well when you connect speakers.)*

For each speaker connect one end of the speaker wire to the speaker terminals on the back of the CA-C550, and one end to the speaker.
1. Open each terminal.
2. Insert the end of the speaker wire as shown (be sure to remove the insulation at the end of each wire first).
3. Take your finger off the catch to close the terminal.
4. Connect the red (+) and black (–) terminals of the right side speaker to the red (+) and black (–) terminals marked RIGHT on the CA-C550. Connect the red (+) and black (–) terminals of the left side speaker to the red (+) and black (–) terminals marked LEFT on the CA-C550.

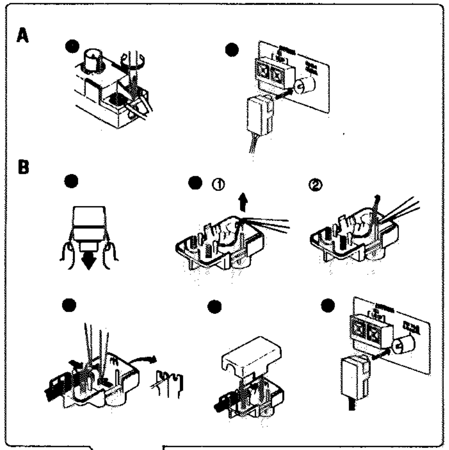


IMPORTANT: Use speakers with the correct impedance only. The correct impedance is indicated on the back panel.

CAUTION: If a TV is installed near speakers, the TV may display irregular colors. In this case, set the speakers away from the TV.

Connecting the FM and AM Antennas

FM Antenna Connections



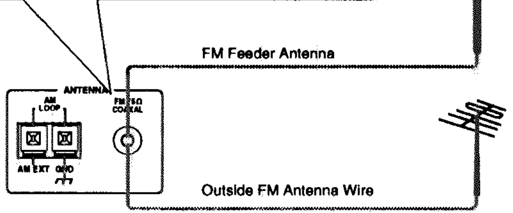
A. Using the Supplied Feeder Antenna

- Attach the feeder antenna to the FM connector as shown in the figure.
- Connect the FM connector to the FM 75-ohm COAXIAL terminal.

B. Using an FM 75-ohm antenna Cable (Not Supplied)

- Open the claws at both sides and remove the cover.
- Move the conductor wire from ① to ② using tweezers or a similar instrument (only when using coaxial cable).
- Fix the coaxial cable and its core.
- Put on the cover.
- Connect the FM connector on the FM 75-ohm COAXIAL terminal.

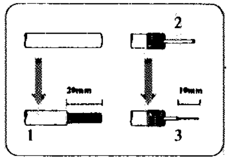
Note: Make sure the antenna conductors do not touch any other terminals, connecting cords or power cord in the system. This could cause poor reception.


FM Feeder Antenna
ANTENNA
AM LOOP
FM 75Ω COAXIAL
AM EXT GND
Outside FM Antenna Wire

Unfold the loops of the supplied dipole FM feeder antenna and extend them as shown. Install them in the position and location which gives you the best FM reception.

If reception is poor, connect the outside antenna.

Before attaching a 75 ohm coaxial lead (the kind with a round wire going to an outside antenna), disconnect the supplied dipole indoor antenna.

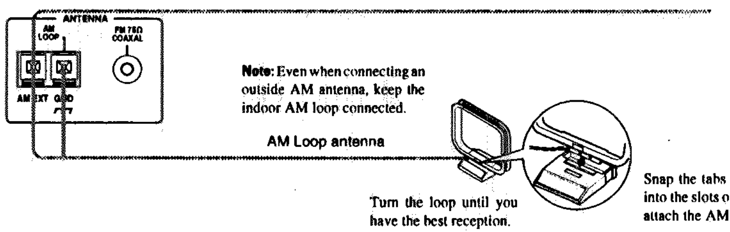

1
2
3
20mm
10mm

How to Strip the 75-ohm Coaxial Cable

1. Strip back the outside covering of the 75 ohm coaxial cable to expose the braided metallic mesh.
2. Pull the mesh back over the cable as shown.
3. Strip the insulation about 10 mm back from the central wire.
4. Attach to the supplied antenna adaptor, as shown in the diagram above.

CAUTION: To avoid noise, keep antennas away from metallic parts of the CA-C550, connecting cords and the AC power cord.

AM Antenna Connections


ANTENNA
AM LOOP
FM 75Ω COAXIAL
AM EXT GND
AM Antenna Wire
AM Loop antenna

If receptions is poor, connect the outside antenna.

Note: Even when connecting an outside AM antenna, keep the indoor AM loop connected.

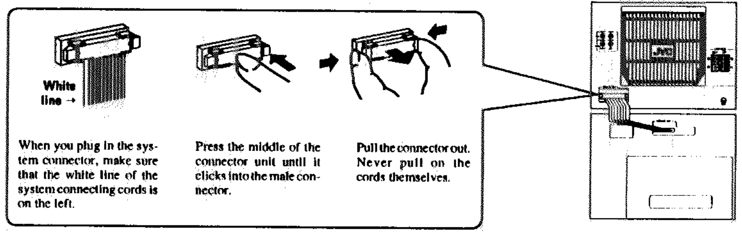
Turn the loop until you have the best reception.

Snap the tabs on the loop into the slots of the base to attach the AM loop.

Connecting the System Control Cords and Connecting Auxiliary Equipment

Connect the components exactly as illustrated below.

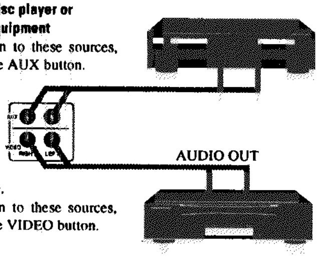
CAUTION: Make all connections before plugging the Unit into an AC power outlet.



When you plug in the system connector, make sure that the white line of the system connecting cords is on the left.

Press the middle of the connector unit until it clicks into the male connector.

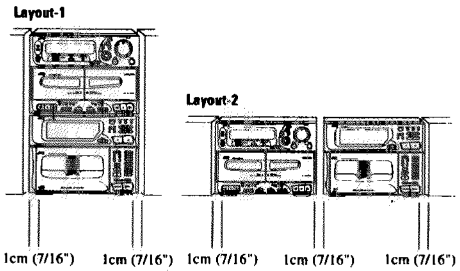
Pull the connector out. Never pull on the cords themselves.



Video disc player or other equipment
To listen to these sources, press the AUX button.

VCR, etc.
To listen to these sources, press the VIDEO button.

Laying Out the System

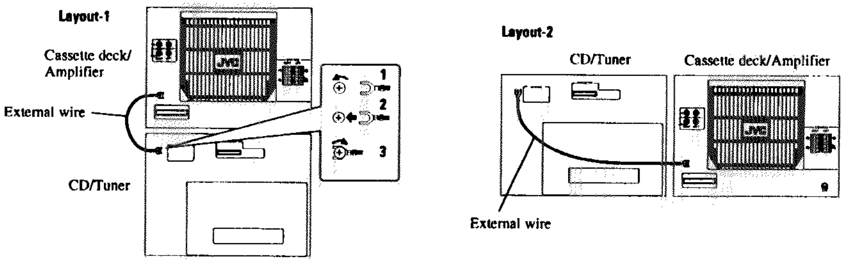

Layout-1
Layout-2
1cm (7/16")
1cm (7/16")
1cm (7/16")
1cm (7/16")
1cm (7/16")

There are two ways to lay out the system, as shown above:

- Leave a space of at least 1 cm on both sides of the amplifier and at least 10 cm at the back, for ventilation.
- If the system does not work or needs repairing, please take all the components with you to the nearest agent.

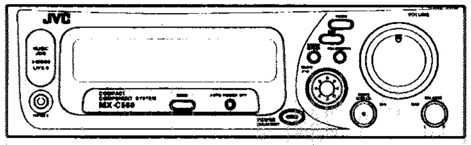
Connecting the External Wire

CAUTION: To prevent malfunction, connect the supplied wire as illustrated below.

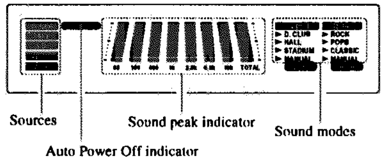

Layout-1
Cassette deck/ Amplifier
External wire
CD/Tuner
1
2
3
Layout-2
CD/Tuner
Cassette deck/Amplifier
External wire

Now you can plug the AC power cord into the wall outlet, and the CA-C550 is at your command!

Using the Amplifier



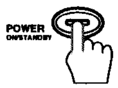
Amp display



The Magic of COMPU PLAY

COMPUPLAY

COMPUPLAY is JVC's feature that lets you control the most used functions of the CA-C550 with a single touch. One Touch Operation starts playing a CD, turns on the radio, plays a tape, etc. with a single press of the play button for that function. What One Touch Operation does for you is to turn the power on, then start the function you have specified. If the Unit is not ready, such as no CD or tape in place, the Unit still powers on so you can put in a CD or tape.
How One Touch Operation works in each case is explained in the section dealing with that function.



Turning the CA-C550 On

Press the POWER button.
The displays come on and the red indicator on the POWER button light goes out.

- ☐ The CA-C550 comes on ready to do whatever it was doing when the power was last shut off. If the last thing you were doing was listening to a tape in Deck B, you are now ready to listen to a tape again in Deck B, or you can change to another source.
- ☐ If you were listening to the radio last, the radio comes on playing the station it was last set to.

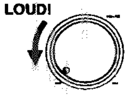
Turning the CA-C550 Off

Press the POWER button again.
The red indicator on the POWER button light up and the displays blank, except for the clock display.

- ☐ A little power (12 watts) is always consumed even though power is turned off (this is called standby mode).
- ☐ To switch off the Unit completely, unplug the AC power cord from the AC outlet. When you unplug the AC power cord, the clock will reset to 12:00 AM right away, while the preset tuner stations will be erased after a few days.

Adjusting the Volume Controls

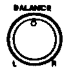
Caution:
Too LOUD!



Volume Control

Turn the VOLUME control to adjust the volume level of the speakers or headphones.

CAUTION: Always set the VOLUME control to MIN before turning on a connected source such as a VCR, or starting any of the other sound sources such as the radio, tape, CD player. Otherwise, if the VOLUME control is set too loud the sudden blast of sound can permanently damage your hearing and/or ruin your speakers.



Balance

Turn the BALANCE control to adjust the left-and-right sound balance in the speakers or headphones.

ACTIVE BASS EX.

Active Bass Extension

This feature is designed and incorporated to reinforce the bass sound, depending on the volume level to maintain the richness and fullness of the bass. You cannot control it manually.
Press the ACTIVE BASS EX. button to light the indicator if you want to use the Active Bass Extension function.
To cancel this function, press the ACTIVE BASS EX. button again. The indicator will go off.

Listening with Headphones

A standard pair of headphones can be connected to the PHONES jack on the front panel. No sound can then be heard from the speakers. Be sure to turn down the volume before connecting or putting on headphones, as high volume can damage both the headphones and your hearing.

LIVE SURROUND effects:
D. CLUB
(Dance Club)
HALL
STADIUM

S.E.A. effects
ROCK
POPS
CLASSIC

Sound Effect Modes

The CA-C550 has some preset sound effects that give you control of the way your music sounds, so you can tailor it for your room and for the quality of the source. We can give you some idea of how each one affects the music, but the only way to really tell is to try them yourself.
You can use only one effect at a time, selecting from the LIVE SURROUND or S.E.A. effects. Feel free to experiment!

LIVE SURROUND effects

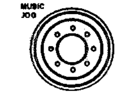
With these effects, the sound coming from only two speakers approaches the quality of sound from four speakers.

D. CLUB	Increases resonance and bass.
HALL	Adds depth and brilliance to the sound, like in a concert hall.
STADIUM	Adds clarity and spreads the sound, like in an outdoor stadium.

Preset S.E.A. (Sound Effect Amplifier) effects

Adjustments of frequency range levels have been preset as three S.E.A. effects.

ROCK	Boosts low and high frequencies.
POPS	Good for vocal music.
CLASSIC	Set for wide and dynamic sound stereo systems.



To choose an effect, turn the MUSIC JOG.
If you select the Live Surround effects, "LIVE-S" appears the amp display. If you select the S.E.A. effects, "SEA" appears on the amp display.
After the equalizing pattern of the Sound Effect mode you selected flickers for a few seconds, each frequency level and total level appear on the amp display.

SOUND EFFECT

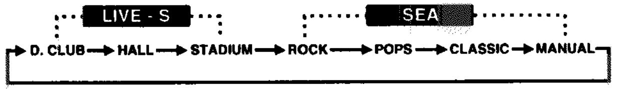
To cancel the effect, press the SOUND EFFECT button; the "LIVE-S" or "SEA" display goes off.

- ☐ When the "LIVE-S" or "SEA" display is off, press the SOUND EFFECT button, to turn Sound Effect on. To select a mode, turn the MUSIC JOG.

Sound Effect Demonstration

You may sometimes be unable to decide which sound effect to use for the music you are listening to. In this case, you can use a very helpful function — Sound Effect Demonstration.

To choose this function, press the DEMO button while playing music; the sound effect demonstration is performed for a few seconds in each mode in the following order.

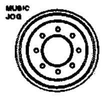


- ☐ "MANUAL" expresses the sound variation generated by increasing and decreasing the frequency levels in the low and high ranges only at demonstration. The CA-C550 does not play in the S.E.A. pattern you preset.

To cancel this function, press the DEMO button again, or turn the MUSIC JOG.

Controlling Sound with the S.E.A. Function

You can store both the S.E.A. pattern with Live Surround effect and that without Live surround effect in memory.



1. Turn the MUSIC JOG and select the Sound Effect mode you prefer.
   When creating a pattern with Live Surround effect, select a mode with "LIVE-S" displayed. When creating a pattern without Live Surround effect, select a mode with "SEA" displayed.

   Note: The Live Surround effect is set for a specified effect regardless of the mode you selected.

SEA CONTROL

2. Press the SEA CONTROL button.
   - ☐ "MANUAL" in "LIVE-S" or "SEA" is selected, "LOW" indicator lights up, and the low frequency range blinks on the amp display.
3. While the low frequency range is blinkging, turn the MUSIC JOG to increase or decrease the level.
   - ☐ If the blinking stops, press the SEA CONTROL button again and turn the MUSIC JOG.

4. Press the SEA CONTROL button.
   - ☐ "HIGH" indicator lights up and the high frequency range blinks.
5. While the high frequency range is blinking, turn the MUSIC JOG to increase or decrease the level.
   - ☐ If the blinking stops, press the SEA CONTROL button twice and turn the MUSIC JOG.
6. Press the SEA CONTROL button.
   The frequency range from low sound to high sound flickers. The pattern you created has now been stored in memory.

☐ To change the MANUAL pattern, repeat the procedure above.

To choose this effect, turn the MUSIC JOG and select each MANUAL.

Advantages of connecting optional equipment

Listening to Optional Equipment

By playing the sound from a VCR or Auxiliary equipment through the CA-C550, you can gain control over how the music or program sounds. Once the connected equipment is playing through the CA-C550, you can apply the sound effects, make recordings, or listen with the headphones.

☐ First make sure that the optional equipment is properly connected to the CA-C550.

1. Set the VOLUME control to MIN.
2. Press the VIDEO button or the AUX button.
   The Unit automatically turns on. "VIDEO" or "AUX" lights up on the amp display.
3. Start playing the selected equipment.
4. Adjust the VOLUME control to the desired listening level.
5. Select a sound effect mode, if you wish.

To cancel the setting
Change the source by starting any one of the CA-C550's built-in sound sources, such as the radio or CD player.

Auto Power Off

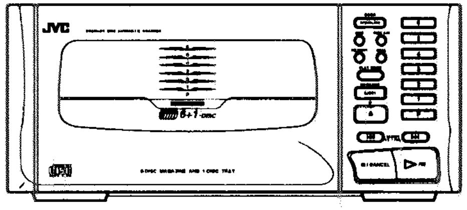
AUTO POWER OFF

When playing either a tape or a CD, Auto Power Off will shut the Unit off when the tape or CD comes to the end. Although Auto Power Off is very useful for shutting off the CA-C550 at night, you can also use it if you think you might forget to turn the Unit off when leaving the house or your room at other times of the day.

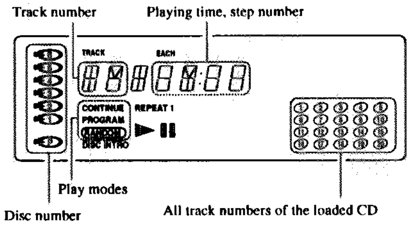
To use Auto Power Off:
Press the AUTO POWER OFF button so that the "AUTO OFF" indicator lights up on the amp display.
To cancel Auto Power Off:
Press the AUTO POWER OFF button again so that the "AUTO OFF" indicator disappears from the display.

Important information on using Auto Power Off
- ☐ The end of CD musical performance varies depending on the play mode of the CD player. If the Play Mode is "CONTINUE" or "RANDOM", when all tracks on the disc set in the CD player end, the power is automatically turned off. If the Play Mode is "PROGRAM", when the last track you programmed ends, the power is automatically turned off.
- ☐ Auto Power Off will still work even though you press the REPEAT button.
  Repeat Mode ("REPEAT" indicator lights up on the CD/Tuner display):
  After all tracks on the disc set in the CD player end, the power is automatically turned off.
  Repeat 1 Mode ("REPEAT 1" indicator lights up on the CD/Tuner display):
  After the current track ends, the power is automatically turned off.
- ☐ If you press the AUTO POWER OFF button while the tape is playing:
  - If Reverse Mode is off (the REVERSE MODE indicator is not lit), the Unit turns off when the current side finishes.
  - If Reverse Mode is on (the REVERSE MODE indicator light up), the Unit plays the current side, reverses and plays the other side, then shuts off.

Using the CD player



CD/tuner display



Here are the basic things you need to know to play a CD and locate the different selections on it. Each selection is called a track, so when we are talking about locating a track, we are also talking about how you find a certain song or performance. This CD player is an automatic changer, which can play 6 discs in the supplied magazine and one on the ordinary single tray, called the PLUS 1 tray.

Compact Disc Play

Basics of Using the CD Player

The quickest way to start a CD is with the One Touch Operation:
- ☐ Press the disc button (1 to 6 and P).
  - If no magazine is inserted, the Unit turns on and the CD door opens.
- ☐ Press the ⊳/❚❚ button (or the ► button on the Remote Control) on the CD player.
  - If a CD is already loaded in the inserted magazine or on the PLUS 1 tray, the Unit automatically turns on and starts to play it, from Track 1.
  - If no CD is loaded, the Unit automatically turns on and the PLUS 1 tray slides out. This is the same as what happens if you press the P ≜ button instead of the ⊳/❚❚ button.

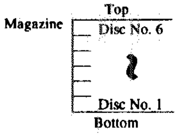
How to use the CD player: basic to advanced

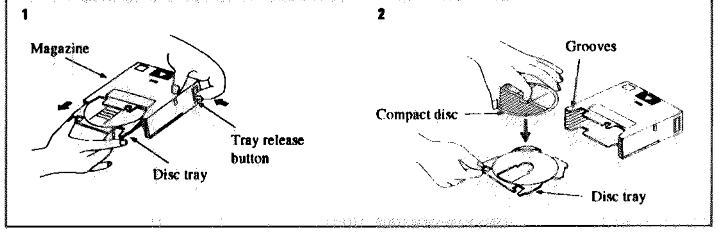
To Prepare Discs

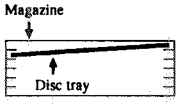
The discs are first loaded into the trays, which are then inserted into the magazine. The magazine is then put into the changer. You can also place a disc on the PLUS 1 tray.

To install discs into the magazine
1. To remove the disc tray from the magazine, slide the disc tray out while holding down the tray release button.
2. Place a disc on the disc tray with its label side up.
3. Line up the disc tray with the grooves in the magazine and push the disc tray right in.
   - ☐ It is not necessary to press the tray release button when inserting the disc tray.

In the magazine, the disc numbers are as follows:

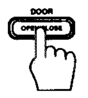






Do not insert disc tray on an angle.

- ☐ When inserting or removing a disc tray:
  - Never bend the disc tray or force it into the magazine. A disc tray inserted on an angle may cause a malfunction.
  - The magazine should be held horizontally.
- ☐ The openings in the disc trays are for passage of the laser signal. These openings leave a part of the shiny surface of the disc exposed. Do not touch this shiny surface.
- ☐ It is impossible to play a disc if it is in upside-down.
- ☐ Never place a disc directly in the magazine without using the disc tray.



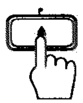
To insert the magazine

1. Press the DOOR OPEN/CLOSE button to open the door.
2. Insert the magazine, with disc loaded, into the changer and push it in gently until it clicks into place.
   ❑ The ▲ mark on the magazine must be facing up.
3. Press the DOOR OPEN/CLOSE button again to close the door.

MAGAZINE
EJECT

To remove the magazine. Press the MAGAZINE EJECT button.

CAUTION: The CD player may be damaged if the magazine is pushed in with too much force.



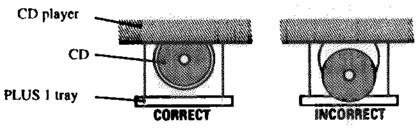
To load a CD on the PLUS 1 tray

1. Press the P ≜ button.
   The door opens and the PLUS 1 tray slides out automatically.
2. Put a CD, with its label side up, into the tray.
3. To close the tray, press the P ≜ button or the DOOR OPEN/CLOSE button.
   ❑ It is not necessary to press the P ≜ button to close the tray. If you press the ▷/II button to start play, the tray closes automatically.

Notes:

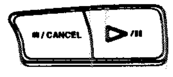
- Remove any objects in front of the door when opening it.
- Do not use your hand to open or close the door.
- When you close the PLUS 1 tray, make sure the magazine is inserted completely.
- Do not operate the Unit while the door is opening or closing.
- When the door is open, do not press the disc button (1 to 6 and P) or change the source.
- When inserting or removing the magazine, do not operate a CD on the PLUS 1 tray. Likewise, when placing a CD on or removing a CD from the PLUS 1 tray, do not operate a CD in the magazine.

***ATTENTION:** Take care to place the CD at the center of the PLUS 1 tray, when you play a CD with the tray. The PLUS 1 tray will malfunction, if you place the CD in the incorrect position.*



To remove a CD from the PLUS 1 tray, press the P ≜ button again.

To Play a CD



1. Load the disc(s).
2. Press the ▷/II button (or the ▶ button on the Remote Control).
   The Unit plays the first track on the disc in the PLUS 1 tray. (The current disc number is indicated by the arrow on the CD/tuner display.) If no disc is loaded on the PLUS 1 tray, the Unit automatically skips the empty tray, and finds and plays the discs you have put in the magazine, from bottom (Disc 1) to top (Disc 6). The indicators for any skipped trays go out. The Unit memorizes these empty trays and will keep skipping them, until the magazine is ejected.

To stop the CD, press the ■/CANCEL button (or the ■ button on the Remote Control).
To pause, press the ▷/II button while the CD is playing.

To Change Discs While Playing

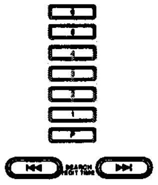
To change discs in the magazine while playing a CD in the PLUS 1 tray.

1. Press the MAGAZINE EJECT button.
   The door opens and the magazine comes out.
2. Change the discs in the magazine.
3. Push the magazine back in.
4. Press the DOOR OPEN/CLOSE button to close the door.

To change the disc in the PLUS 1 tray while playing a CD in the magazine.

1. Press the P ≜ button.
   The door opens and the PLUS 1 tray slides out.
2. Change the disc.
3. Press the P ≜ button again or the DOOR OPEN/CLOSE button.
   The tray slides shut.
   ❑ While playing a CD, keep the door closed except when changing discs.

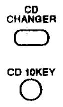
How to find a track



To Select the Disc, Track or Passage within a Track

By using the Unit

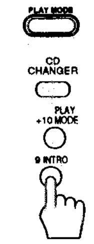
1. If the disc with the track you want is not playing, enter the number of disc you want using the disc buttons (1 to 6 and P) on the far right of the CD player.
   ❑ Example: for the third disc (from the bottom) in the magazine, press 3.
   For the disc on the PLUS 1 tray, press P.
2. Select the number of the track you want, using the SEARCH/EDIT TIME ⏮ or ⏭ button.
   The selected track starts playing.
   ❑ Each time you briefly press and release the SEARCH/EDIT TIME ⏮ or ⏭ button, the track changes by one.
   Press and release the SEARCH/EDIT TIME ⏭ button to go ahead one track at a time.
   Press and release the SEARCH/EDIT TIME ⏮ button to go back one track at a time.
   ❑ Holding down the SEARCH/EDIT TIME ⏮ or ⏭ button will fast forward or fast reverse the CD so you can quickly find a particular passage in the selection you are listening to.



By using the Remote Control

1. If the disc with the track you want is not playing, first press the CD CHANGER button, then enter the number of the disc you want, using the numeric keys (1 to 6 and P).
   ❑ Example: for the third disc (from the bottom) in the magazine, press 3.
   For the disc on the PLUS1 tray, press P.
2. Press the CD 10KEY button.
3. Enter the number of the track you want using the numeric keys.
   The selected track starts playing.
   ❑ Example: for track 5, press 5. For track 15, press +10 then 5. For track 20, press +10, then 10.
   ❑ You can also use the ⏮ or ⏭ button to change tracks. However, you cannot fast forward or reverse forward to locate a particular passage using the Remote Control.

Searching the contents of CDs



Intro Scan

You can use two types of Intro Scan functions (Disc Intro Scan and Track Intro Scan) to search for a desired disc or track.

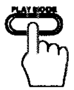
1. Make sure that the CD is not playing and that "CONTINUE" appears on the CD/Tuner display.
   If not, stop the CD player and press the PLAY MODE button on the Unit (for the Remote Control, press the CD CHANGER button, then press the PLAY MODE button) until the CD/Tuner display reads "CONTINUE".
2. Press the CD CHANGER button on the Remote Control.
3. Press the INTRO button on the Remote Control.
   Each time you press the button, the Intro Scan mode changes and lights up on the CD/Tuner display in the following sequence:
   → **DISC INTRO** → **INTRO** → No indication ↩
4. Press the ▷/II button (or the ▶ button on the Remote Control).
   Disc Intro Scan (when "DISC INTRO" lights up):
   Plays the beginning of the first track of each CD for about 15 seconds starting with the disc on the PLUS 1 tray and then Disc 1 through Disc 6 in the magazine.
   Track Intro Scan (when only "INTRO" lights up):
   Plays the beginning of each track of each CD for about 15 seconds starting with the disc on the PLUS 1 tray and then Disc 1 through Disc 6 in the magazine.
5. Press the SEARCH/EDIT TIME ⏮ button (or the ⏮ button on the Remote Control) when the desired track is reached.
   Intro scan is canceled and normal playback starts from the selected track.
   ❑ If you press the following buttons instead of the SEARCH/EDIT TIME ⏮ button (or the ⏮ button on the Remote Control), Intro Scan is also canceled, and:
   - If you press the SEARCH/EDIT TIME ⏭ button (or the ⏭ button on the Remote Control) : Continuous Play starts from the next track.
   - Disc buttons (1 to 6 and P (PLUS 1)): Continuous Play starts from the first track of the selected disc.

To stop playing, press the ■/CANCEL button (or the ■ button on the Remote Control).
To exit Intro Scan mode, press the INTRO button so that neither "DISC INTRO" nor "INTRO" appears on the display.

With programming, you can play back tracks in any order

Programming the Playing Order of the Tracks

In addition to the high quality sound which makes the CD such a good way to listen to music, you can change the order in which the tracks play.



Random Play

The tracks will play in no special order when you use this mode.
Before starting a CD, press the PLAY MODE button repeatedly until "RANDOM" lights up on the CD/Tuner display.
When all of the tracks have been played, the CD stops.

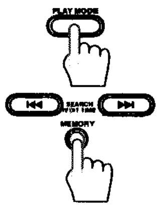
To stop playing, press the ■/CANCEL button (or the ■ button on the Remote Control).
To exit random mode, press the PLAY MODE button until "RANDOM" no longer appears on the CD/Tuner display (the Unit must be in stop mode).

Program Play

You can change the order in which the discs and tracks play, and select only the discs and tracks you want from among those loaded in the magazine and the PLUS 1 tray.

- ☐ You can program from either the Unit or the Remote Control, or a combination of both.
- ☐ You can program up to 32 steps in any desired order from among the discs in the player. Since a step can be either a single track or an entire disc with many tracks, the total number of selections which will actually play can be much larger than 32.

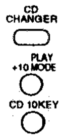
How to program



Programming Procedure:
You can only make or change a program when the CD player is stopped.

By using the Unit

1. Press the PLAY MODE button repeatedly until "PROGRAM" appears on the CD/Tuner display.
2. Select a disc with the disc buttons (1 to 6 and P). As soon as a disc is selected, it is memorized and "AL" lights up on the CD/Tuner display. If you want all the tracks on that disc to play as part of the program, skip steps 3 and 4.
3. To select individual tracks from the selected disc (its number is indicated by the arrow on the display), press the SEARCH/EDIT TIME ⏮ or ⏭ button.
4. Press the MEMORY button on the CD player.
5. Repeat steps 2 - 4 until you have entered all the tracks you want to program.
6. Press the ▷/II button.
   The Unit plays the tracks in the order you have programmed them.



By using the Remote Control

1. Press the CD CHANGER button.
2. Press the PLAY MODE button repeatedly until "PROGRAM" appears on the CD/Tuner display.
3. Select a disc with the numeric keys (1 to 6 and P).
4. To select individual tracks from the selected disc enter each number by pressing the CD 10 KEY button and using the numeric keys (1 to 10 and +10).
   ☐ Example: for track 5, press 5. For track 15, press +10 and 5. For track 20, press +10 and 10.

☐ You can also use the ⏮ or ⏭ button to select tracks. If you use the ⏮ or ⏭ button to select tracks, press the MEMORY button on the CD player after selecting tracks you like.

5. Repeat 1 and 3 - 4 until you have entered all the tracks you want to program.
6. Press the ▶ button.
   The Unit plays the tracks in the order you have programmed them.

To stop playing, press the ■/CANCEL button (or the ■ button on the Remote Control) once.

To delete the program and exit program mode, press the ■/CANCEL button on the Unit repeatedly until all the program steps are deleted, and then press the PLAY MODE button until "CONTINUE" appears on the display.

- ☐ You can skip to a particular program step by pressing the SEARCH/EDIT TIME ⏮ or ⏭ button (or the ⏮ or ⏭ button on the Remote Control) during program play.
- ☐ To play the programmed tracks over and over, press the REPEAT button on the Remote Control. "REPEAT" lights up on the display.

Programming Hints

A few Hints to Make Programming Easier

To check the program contents (the Unit must be in stop mode)

- ☐ Each time you press the CALL button on the Unit, the program contents are shown on the CD/Tuner display in the programmed order.

To change the program contents

- ☐ Press the CALL button on the Unit until the CD/Tuner display shows the program step to correct and use the Remote Control to enter the new disc number and/or track number, which will replace the one originally showing.
- ☐ To delete a program step, press the CALL button until the CD/Tuner display shows the program step to delete, then the press the ■/CANCEL button.
- ☐ You can use both of these ways to change program steps during programming as well as later.

Repeat a selection or the CDs

Repeating a Selection or the Discs

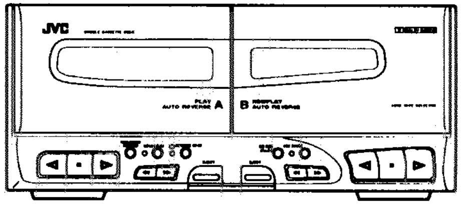
You can have all the discs, the program or the individual selection currently playing repeat as many times as you like by pressing the REPEAT button on the Remote Control.

1. Press the CD CHANGER button on the Remote Control.
2. Press the REPEAT button on the Remote controller.
   Each time you press the REPEAT button, it cycles from function-off, which turns "REPEAT" out on the CD/Tuner display, to "REPEAT" which will repeat all the tracks in order or according to the program you have set, and then to "REPEAT 1" which will repeat the currently playing track.

To exit repeat mode, press the REPEAT button so that neither "REPEAT" or "REPEAT 1" appears on the display.

☐ Press the REPEAT button before or during random play to instruct the CA-C550 to continue with a different random track selection after the last selection of the last disc is played.

Using the Cassette Deck



Listening to a Tape

Listening to a tape:
How to use your cassette deck

The cassette deck allows you to play, record and dub audio tapes.

❑ Most tapes are now recorded with the Dolby NR system, so first check which type of the Dolby NR system has been used on the tape. Only the Dolby B NR is incorporated into the CA-C550.

❑ With Automatic Tape Detection, you can listen to type I or II tapes without changing any settings.

COMPU PLAY

One Touch Play

By pressing either the ▷ or ◁ button (or the ◀ or ▶ button on the Remote Control) on either Deck A or B, the Unit will come on, and if a tape is in the deck, it will start to play. If no tape is loaded, the Unit will come on and wait for you to insert a tape, or select another function.

Regular Play

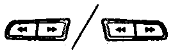
Playback procedure

EJECT
EJECT

When the power is already on, you can use this basic procedure:

1. Press the EJECT button for the deck you want to use.
2. When the cassette carrier opens, put the cassette in, with the exposed part of the tape down, toward the base of the CA-C550.
   ❑ If the cassette carrier does not open, turn the Unit off, then back on and press the EJECT button again.
3. Close the carrier gently.
4. Press the ▷ button to play the front side, or the ◁ button to play the reverse side. The arrow indicator on the pressed button flashes and the tape starts playing.

To stop playing, press the ■ button.
To remove the tape, press the EJECT button.



Fast Left and Fast Right

❑ While the tape is stopped, press the ◀◀ button and the tape will wind rapidly onto the left side of the cassette without playing.

❑ While the tape is stopped, press the ▶▶ button and the tape will wind rapidly onto the right side of the cassette without playing.

Music Scan

Finding the place you want: Music Scan

To find the beginning of a music track during play, use the Music Scan function. Music Scan searches for blank portions that usually separate tracks, then plays the next song.
Warning: If you use Music Scan on Deck A while recording on Deck B, recording will stop.

Scan back

To find the beginning of the current song

Press the ◀◀ or ▶▶ button during play.

❑ Make sure that you press the ◀◀ or ▶▶ button in the opposite direction the tape is playing. Searching stops at the beginning of the current song, and the current song starts automatically.

Scan forward

To find the beginning of the next song

Press the ◀◀ or ▶▶ button during play.

❑ Make sure that you press the ◀◀ or ▶▶ button in the same direction the tape is playing. Searching stops at the beginning of the next song, and the next song starts automatically.

Music Scan works by detecting a 4-second long blank at the beginning of each selection, so it won't work well if your tape has:

- No blank at the beginning of a track
- Noise (often caused by much use or poor quality dubbing) which fills the blank with noise.
- Long, very soft passages or pauses in a selection. The scan will detect these as 4-second long blanks. If this happens, just scan again until you reach the selection you want.

Other Useful Features of the Cassette Deck

More useful things to know:

- **Reverse Mode**
- **Continuous Play**

REVERSE MODE

- **Dolby**

❑ Use **Reverse Mode** to make the tape automatically reverse at the end of a side and start playing the other side. Press the REVERSE MODE button to change from Reverse Mode on (the indicator is lit) to Reverse Mode off, or from off to on.

❑ **Continuous Play:** With the Reverse Mode LED on, when a tape finishes playing the Unit always checks to see if a tape is in the other deck. If there is, it automatically starts playing. This Continuous Play function works regardless of which deck starts first.

❑ Press the DOLBY B NR button to switch Dolby B Noise Reduction on (the indicator lights up) or off (the indicator goes off). If a tape is recorded with the Dolby B NR system, playing it back with the Dolby NR on will reduce tape noise and improve the clarity of the sound.

Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation. "DOLBY" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.

Recording

What can you record?

- **Tapes**
- **Radio**
- **CDs**
- **Connected source**

Recording onto a cassette from any of the sound sources is simple. Just place a tape in deck B, have the source ready, make one or two settings, and you're ready to record. For each source the procedure is a little different and now we'll explain just what to do for each one. If you forget, just come back to the section which has the specific procedures you need. But first, here are a few things to make your recordings better.

Things to Know Before You Start recording

Copyright

❑ **It may be unlawful to record or playback copyrighted material without the consent of the copyright owner.**

Reduce hiss — Dolby NR

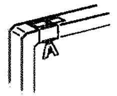
❑ Press the DOLBY B NR button — the indicator lights up — to reduce tape hiss, except when dubbing tapes, since Dolby NR is inactive in dubbing mode regardless of the setting of DOLBY B NR. The dubbed tape automatically contains the same processing as the source tape.

Recording level

❑ The recording level, which is the volume at which the new tape is being made, is automatically set correctly, so it is not affected by the VOLUME control on the CA-C550. Thus, during recording you can adjust the sound you are actually listening to without affecting the recording level.

Erasure protection

❑ Two small tabs on the back, one for side A and one for side B, can be removed to prevent accidental erasure or re-recording. To record on a cassette with the tabs removed, you must cover the holes with adhesive tape first. However, when a type II tape is used, only cover part of the hole as shown, since the other part of the hole is used to detect the tape type.



Recording sound mode

❑ When recording, you can use the sound effect modes to condition the music as it is recorded. But when recording using CD Direct, Auto Edit or Program Edit, once recording has started, these settings cannot be changed. When recording from cassette Deck A to Deck B, the sound effects cannot be used, because the signal doesn't go through the amplifier. This method gives you the highest quality dubbed tapes.

Usable Tape Types

❑ Type I and Type II tapes can be used for recording.

CAUTION: If recordings you have made have excessive noise or static, the Unit may be too close to a TV which was on during the recording. Either turn off the TV or increase the distance between the TV and the CA-C550.

Standard recording: Any source to tape

Standard Recording

This is the basic method for recording any source. The CA-C550 also has special ways for recording CD to tape, and tape to tape, which save you time and effort, as well as give you some special effects.
However, when you need to add a selection to a tape you have made, or are combining selections from several sources on one tape, use the method described below; just substitute the source you want, such as tape in Deck A, or CD, or radio in this procedure. You can also record from an auxiliary source with this procedure.

Source to tape: Step by step

To Record Any Sound Source to Tape

Follow these steps to record from any sound source onto a tape in deck B.

1. Insert a blank or erasable tape into deck B.
2. Press the REC PAUSE button.
   The REC PAUSE indicator lights up.
3. Press the REVERSE MODE button if you want to record on both sides of the tape.
   The REVERSE MODE indicator lights up.
4. Prepare the source, for example, tuning in a radio station, loading CDs, turning on connected equipment.
5. On Deck B, press either the ▷ button to record on the front side, or the ◁ button to record on the reverse side.

To pause at any time during the recording process
Press the REC PAUSE button again. Then press either the ▷ or ◁ button on deck B to restart recording.

To stop at any time during recording process
Press the ■ button on Deck B.

CAUTION: During recording, DO NOT change the source or change discs. Otherwise, recording will be interrupted.

CD to tape recording: Introduction

CD to Tape Recording

There are four ways to record from CD to tape:

☐ **Standard Recording** — Described above.
☐ **CD Direct Recording** — Everything on the CD goes onto the tape in the order it is on the CD, or according to an order you have set in a program.
☐ **Auto Edit Recording** — Your CA-C550 figures out which selections to put on which side of the tape, so a selection isn't cut off before it's finished when the tape runs out.
☐ **Program Edit Recording** — First you select tracks to record by using the programming method described on page 12, and then start play and recording simultaneously.

CD Direct Recording: Step by step

CD REC START

CD Direct Recording

1. Prepare CDs. (See page 9.)
2. Set the sound effect mode if you want.
3. Insert a cassette in Deck B to record on.
   ☐ If you want to record on both side of the tape, press the REVERSE MODE button on the cassette deck so that the REVERSE MODE indicator lights up.
4. Press the CD REC START button on the cassette deck.
   The Unit plays the CDs (from the disc on the PLUS 1 tray then the discs in the magazine) and starts recording.

At the end of the tape, the CA-C550 automatically goes back to the beginning of the last selection and re-records it, this time gently fading out at the end. If you selected the Reverse Mode, the reverse side starts with the last selection on the front side and will be faded out at the end again. (A 10 second blank is created at the beginning of the reverse side.)
When the tape is finished, the Unit stops the CD and the cassette deck.

To stop at any time during the recording process
Press the ■ button on Deck B.

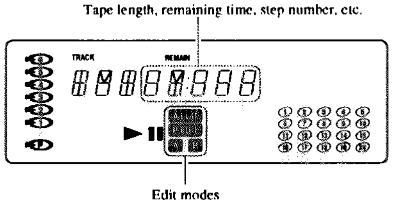
For CD Direct Recording using more than one disc, use a blank tape. If you use a pre-recorded tape, pre-recorded sound may not be erased between newly-recorded tracks.

Auto Edit Recording: Introduction

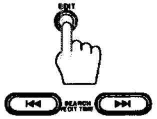
Auto Edit Recording

Using Auto Edit, you can record the CD tracks to fit the tape, so a selection isn't cut off. Auto Edit is one of the best ways to copy all of a CD onto a tape.
Auto Edit programs the CD tracks in numerical order. To prevent the end of the last track on the front side from being cut off, the last track on the front side is selected to fit on the remaining tape length.

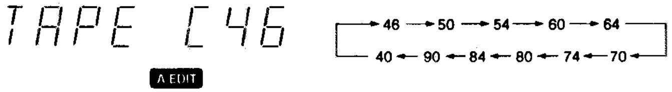
CD/Tuner display



Auto Edit Recording: Step by step



1. Prepare CDs. (See page 9.)
2. Set the sound effect mode if you want.
3. Press the EDIT button on the CD player repeatedly until "A. EDIT" lights up on the CD/Tuner display.
4. Press the SEARCH/EDIT TIME ⏮ or ⏭ button repeatedly to set the tape length.
   ☐ You can select a different length of tape from ten possibilities programmed into the CA-C550: 40, 46, 50, 54, 60, 64, 70, 74, 80, 84, 90. Cycle through these choice using the SEARCH/EDIT TIME ⏮ or ⏭ button. (You cannot use the ⏮ or ⏭ button on the Remote Control to select the tape length.)



5. Press the SIDE A/B button.
6. Select a disc with the disc buttons (1 to 6 and P).
   The display shows which tracks will go on the front side (A) and which on the reverse side (B). Each time you press the SIDE A/B button, the display switches between A and B.
7. Insert a blank or erasable cassette in Deck B.
   ☐ If you want to record on both sides of the tape, press the REVERSE MODE button on the cassette deck so that the REVERSE MODE indicator lights up.

CD REC START

8. Press the CD REC START button on the cassette deck.
   The Unit will automatically rewind the tape to the beginning of the front side, create a 10 second blank, turn on the CD and start recording. (A 10 second blank is also created on the beginning of the reverse side.)

☐ After the recording is finished, press the PLAY MODE button repeatedly until "CONTINUE" lights up on the CD/Tuner display.

To stop at any time during the recording process
Press the ■ button on Deck B or ■/CANCEL button on the CD player.

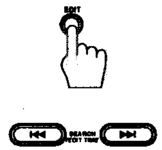
To exit edit mode and delete the program
Press the PLAY MODE button so "A.EDIT" is no longer lighted on the CD/Tuner display (the Unit must be in stop mode.)

Using Auto Edit, you can program up to 16 tracks for each side of the tape. Also you can only program disc track number up to 31.

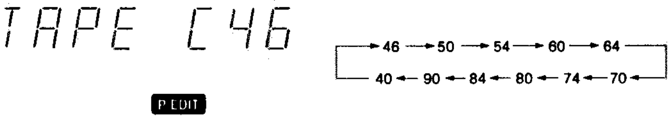
Program Edit Recording: Step by step

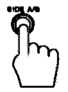
Program Edit Recording

Using Program Edit, you can record only the CD tracks you want, and fit them onto the tape. Program Edit is one of the best ways to make a tape of your favourite songs.

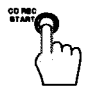


1. Prepare CDs. (See page 9.)
2. Set the sound effect mode if you want.
3. Press the EDIT button on the CD player repeatedly until "P. EDIT" appears on the CD/Tuner display.
4. Press the SEARCH/EDIT TIME ⏮ or ⏭ button repeatedly to set the tape length.
   ☐ You can select a different length of tape from ten possibilities programmed into the CA-C550: 40, 46, 50, 54, 60, 64, 70, 74, 80, 84, 90. Cycle through these choices using the SEARCH/EDIT TIME ⏮ or ⏭ button. (You cannot use the ⏮ or ⏭ button on the Remote Control to select the tape length.)





5. Press the SIDE A/B button and select the tracks you want to record on the front side (A). (See "Program Play" on page 12. For Program Edit, however, it is impossible to program all the tracks on a disc in one program step.)
   The display shows which tracks will go on the front side (A).
   ☐ If the total playing time for the front side (A) exceeds the tape length for this side, the excess playing time is displayed, blinking. During recording, the last track on this side will be recorded fading out at the end of the tape.
6. Press the SIDE A/B button and select the tracks you want to record on the reverse side (B). (See "Program Play" on page 12. For Program Edit, however, it is impossible to program all the tracks on a disc in one program step.)
   The display shows which tracks will go on the reverse side (B).
   ☐ If the total playing time for the reverse side (B) exceeds the tape length for this side, the excess playing time is displayed, blinking. During recording, the last track on this side will be recorded fading out at the end of the tape.
7. Insert a blank or erasable cassette in Deck B.
   ☐ If you want to record on both sides of the tape, press the REVERSE MODE button on the cassette deck so that the REVERSE MODE indicator lights up.



8. Press the CD REC START button on the cassette deck.
   The Unit will automatically rewind the tape to the beginning of the front side, create a 10 second blank, turn on the CD and start recording. (A 10 second blank is also created on the beginning of the reverse side.)

☐ After the recording is finished, press the PLAY MODE button repeatedly until "CONTINUE" lights up on the CD/Tuner display.

To stop at any time duing the recording process
Press the ■ button on Deck B or ■/CANCEL button on the CD player.

To exit edit mode and delete the program
Press the PLAY MODE button so "P. EDIT" is no longer lighted on the CD/Tuner display (the Unit must be in stop mode.)

☐ If you choose the wrong tracks during programming, press the ■/CANCEL button on the CD player. Each time you press the button, the last-chosen track is deleted from the program.
☐ Using Program Edit, you can program up to 16 tracks for each side of the tape. Also you can only program disc track numbers up to 31.
☐ If you want to make changes in a program while the front side is recording, make sure that the display shows the tracks for the front side (A) when you restart recording. If not, press the SIDE A/B button.

Tape to tape dubbing: Introduction

Tape to Tape Recording (Dubbing)

Recording from one tape to another is called dubbing.
You can dub at regular speed for the best possible quality, or with a slight loss in sound quality you can dub at high speed. With high speed it takes only about one-half the time to copy a tape.
☐ To dub both sides of a tape, start from side A for both Deck A and Deck B, and press the REVERSE MODE so that the REVERSE MODE indicator lights up.
☐ It is preferable that the type of tape (Type I or Type II) you record from be the same as the type you record onto.

Regular speed dubbing: Step by step

Regular Speed Dubbing

1. Insert a source cassette you want to copy from into Deck A for playback.
2. Insert a blank or erasable cassette you want to copy onto into Deck B for recording.
3. Press the REC PAUSE button on Deck B.
4. Press the ▷ button (or the ◁ button) on Deck B.
   Recording starts.
   - To advance the leader tape (the beginning of the tape on which you cannot record), start recording first and wait about 10 seconds before starting Deck A.
5. Press the ▷ button (or the ◁ button) on Deck A.
   Deck A starts playing.

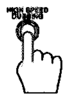
To stop at any time during the dubbing process
Press the ■ button on both Deck A and Deck B.

High speed dubbing: Step by step

High Speed Dubbing

Although the quality of the dubbed tape is a little less, high speed dubbing is a very convenient way to record from one tape to another.

1. Insert a source cassette you want to copy from into Deck A, and a blank or erasable cassette to be copied onto in Deck B.
2. For each deck, select the side (A or B) to start with.
   To change the side, press the ◁ or ▷ button and then quickly press the ■ button on the same deck.
   ☐ The tape will travel in the direction of the lit arrow indicator on the ◁ or ▷ button for each deck.



3. Press the HIGH SPEED DUBBING button on the cassette deck.
   Both decks start, Deck A playing and Deck B recording.
   ☐ The sound you hear is strange because it is much faster than usual, and you may not want to listen to it. Turn it down with the VOLUME control, or press the FADE MUTING on the Remote controller.
   ☐ You can listen to another source, such as the radio or the CD player, just as if you weren't dubbing.

To stop at any time during the dubbing process
Press the ■ button on Deck B.

To record selections from several different tapes during high speed dubbing.
When you want to take selections from several different tapes and combine them on one tape during high speed dubbing, follow these steps:

1. Press the ■ button on Deck A.
   ☐ This causes Deck A to stop, so you can change tapes, and Deck B makes a few seconds blank and pauses.
   - If you don't want to make a few seconds blank, press the REC PAUSE button before pressing the ■ button on Deck A.
2. Change the tape in Deck A.
3. Press the HIGH SPEED DUBBING button to start Deck A playing and Deck B recording again.

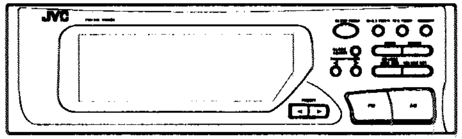
☐ Dolby NR is inactive in dubbing mode regardless of the setting of DOLBY B NR. The dubbed tape automatically contains the same processing as the source tape.
☐ You cannot dub using the sound effect modes, such as D. CLUB, HALL, STADIUM etc.

Recording with the Timer

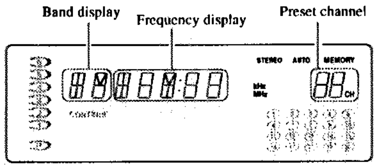
The Cassette Deck can be set to record a tape automatically. This is especially useful for recording broadcasts when you are not at home, or late at night when you are asleep.

1. Insert a cassette for recording into Deck B.
2. Set the REC Timer, by following the steps in "Setting the REC (Recording) Timer" (Page 22).

Using the Tuner



CD/Tuner display



Listening to the Radio

You can listen to both FM and AM stations. Stations can be tuned in manually, automatically, or from preset memory storage.

❑ Before listening to the radio:
  - Check that both the FM and AM antennas are firmly connected.

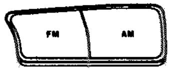
COMPU PLAY Radio

One Touch Radio

Just press the FM button to turn on the Unit and start playing the most recent FM station tuned in, or press the AM button to listen to the most recent AM station tuned in.

  ❑ You can switch from any other sound source to the radio by pressing either the FM or AM button.

Tuning in a Station



Press the FM or AM button to turn on the radio. The CD/Tuner display shows the station frequency tuned to.

Three ways to tune in a station

TUNING/DIMMER

Three ways to select a station

❑ Press the TUNING/DIMMER < or > button repeatedly to move from frequency to frequency until you find the one you want.

OR

❑ Hold down the TUNING/DIMMER < or > button, the frequency starts changing on the CD/Tuner display. When a station is tuned in, "TUNED" lights up on the display and the frequency stops changing.

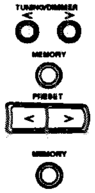
OR

❑ (Possible only after presetting stations.)
Press once and release the PRESET < or > button to go to the next preset station, or hold the PRESET < or > button to cycle through the preset stations: release the button when the preset station you want shows on the CD/Tuner display.

You can also use the Remote controller to tune in preset channels:

1. Press the TUNER button so that you can receive the most recent station tuned in.
2. Select the station by entering the preset number in the numeric keys of the Remote controller.

How to preset FM and AM radio stations



Presetting Stations

You can store up to 40 of your favorite radio stations (FM and AM) in memory, giving you quick, easy access to these stations.

1. Select a band by pressing either the FM or AM button.
2. Press the TUNING/DIMMER < or > button to tune in a station.
3. Press the MEMORY button on the Tuner.
   On the CD/Tuner display, "MEMORY" will blink for 5 seconds.
   ❑ During these 5 seconds while "MEMORY" is blinking you can assign a channel number to the station and enter it into the memory.
4. Select a channel number by pressing the PRESET < or > button until you find the channel number you want.
5. Press the MEMORY button and the station will be assigned to the channel number showing on the CD/Tuner display.
   ❑ If a station has been previously stored using the same channel number, this will be erased and the newly selected station will be stored.
   ❑ If "MEMORY" in the CD/Tuner display goes off, start again from step 3.
6. Repeat steps 1 - 5 for each station you want to store in memory with a preset number.

Caution! If the Unit is unplugged or if a power failure occurs, the preset stations stored in memory may be lost.

Receiving in Stereo or Mono

FM MODE
/MUTE

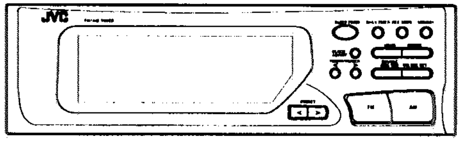
The CA-C550 can receive FM broadcasts in either stereo or mono. When "AUTO" lights up on the CD/Tuner display, the Unit automatically receives broadcasts in the mode they are transmitted. (When a stereo broadcast is received, "STEREO" lights up on the display.) Furthermore, you won't hear noise while tuning in stations. Usually, leaving the Unit in Auto Mode, with "AUTO" lit, gives you the best reception.

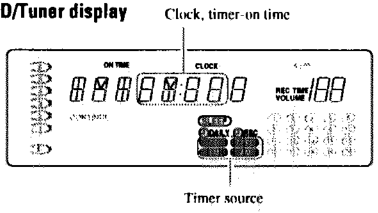
When an FM stereo broadcast is reception is poor:
Press the FM MODE/MUTE button of the Remote Control; the "AUTO" indicator goes off. The Unit switches to mono reception only, but sound quality improves

To restore stereo effect, press the FM MODE/MUTE button again so that "AUTO" appears on the display.

Using the Timers

CD/Tuner display





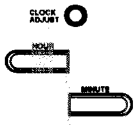
Three Timers:
- **REC TIMER**
- **DAILY TIMER**
- **SLEEP TIMER**

The timers let you control recording and listening functions automatically.
Three types of timers are available:

- ☐ **REC (Recording) Timer** — Unattended recording of radio broadcasts. You can set the starting time and length of the recording.
- ☐ **DAILY Timer** — Wake up to music from any source.
- ☐ **SLEEP Timer**— Fall asleep and have your CA-C550 turn off automatically after a certain length of time.

IMPORTANT!
Set your clock

Clock Setting



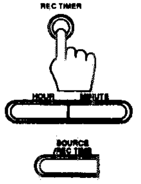
The timers depend on the clock: the clock must be right for the timers to work as you expect.
Special Notice: The clock must be set, or the timers cannot be set!

So, set the clock first.

1. Press the CLOCK ADJUST button.
2. Set the hour by pressing the HOUR button.
   Each time you press it, the hour advances by one. Hold the button down, and the hour displayed will advance continuously, until you release the button.
3. Set the minutes by pressing the MINUTE button.
   Each time you press it, the minutes advance by one. Hold the button down, and the minutes advance in ten minute increments, until you release the button.
4. Press the CLOCK ADJUST button again and the clock is set for the hour and minute you have selected, starting from zero seconds.

Caution! If there is a power failure, the clock loses its setting. The display shows "AM 12:00", and the clock must be reset.

Setting the REC (Recording) Timer



With the Recording Timer you can make a tape of a radio broadcast automatically whether or not you are home. For the timer to work correctly, you need to make sure of the following in addition to setting the time for the radio and tape recorder to come on:

- ☐ You can set the Recording Timer whether the Unit is on or off.
- ☐ The tape you want to record onto must be in Deck B.
- ☐ The radio station whose program you want to tape must be the last one played before timer comes on.

Procedure for setting the Recording Timer:

1. Press the REC TIMER button so that "REC" blinks on the CD/Tuner display. As long as it is blinking, you can continue with the setting process.
   - ☐ If you wait too long, and it stops before you are done, just press the REC TIMER button twice and start over.
2. Set the time you want the radio to come on, and put a tape in Deck B to record on:
   Press the HOUR button to set the hour and the MINUTE button to set the minute.
3. Press the SOURCE/REC TIME button to set the length of time for the recording.
   Each time you press this button, the duration increases by one minute. If you hold the button down, it will advance in ten minute increments up to 120 minutes, which is the maximum time you can set.
   - ☐ At the end of the set length of time the radio and Deck B will shut off.
     - If you set no time, but leave the display showing "—:—", the CA-C550 will not shut off, but keep recording/playing until you shut it off.

4. Press the REC TIMER button again, or wait eight seconds.
   The set contents are displayed for a few seconds and the "REC" indicator lights up.
   The Unit will memorize the setting. When the set time comes, the CA-C550 turns the power on, reduces the volume to 0, and records the broadcasting station you selected last, before turning the power off.
   - ☐ If you press any button while the Recording Timer is being activated, the recording will stop.

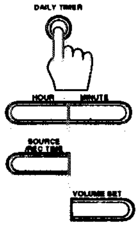
Before the set time comes

- ☐ Check that tape direction is correct. This is important especially when Reverse Mode is off.
- ☐ Set Reverse mode on if you want to record on both sides of the tape.
- ☐ Select the Sound mode if you want to record with one of the Sound mode (D. CLUB, HALL STADIUM, etc.).

It is very easy, and can be very disappointing, to forget to put in a tape, or to accidentally leave a tape in Deck B you don't want recorded over. Although this happens to almost everyone at one time or another, we hope it won't happen to you!

To Change the Recording Timer setting
Press the REC TIMER button twice ("REC" reappears) and make any changes you want.
To cancel the Recording Timer setting
Press the REC TIMER button again so that "REC" goes off on the CD/Tuner display.

Setting the DAILY Timer



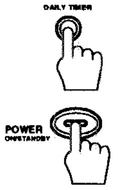
With this timer you can wake up to music from a CD, tape or your favourite radio program.

- ☐ You can set the DAILY Timer whether the Unit is on or off.

Procedure for setting the DAILY Timer:

1. Press the DAILY TIMER button so that "DAILY" blinks on the CD/Tuner display.
2. Set the time you want the Unit to turn on:
   - ☐ Press the HOUR button to set the hour and the MINUTE button to set the minute.
3. Press the SOURCE/REC TIMER button to set the source.
   - ☐ Each time you press this button, the display shows one of the four possible sources: CD, TAPE, FM or AM. Select one.
     - If you select FM or AM as the source, the last played station is the one which comes on at the set time.
     - If the CD is the source, when the set time comes, CA-C550 plays in the Play Mode you set before turning the power off.
4. Press the VOLUME SET button to set the volume level.
   - ☐ Each time you press this button, the Unit gives you one of the following settings:

Display	**What it means**
VOLUME — —	Volume set to level used before the power was shut off
VOLUME 1	Volume barely on
VOLUME 2	Volume at about a 1/4 turn of the volume control
VOLUME 3	Volume at about a 3/8 turn of the volume control



5. Press the DAILY TIMER button again, or wait eight seconds.
   The set contents are displayed for a few seconds and the "DAILY" indicator lights up.
   The Unit will memorize the setting.
6. Turn the power off.
   When the set time comes, the CA-C550 turns on ("DAILY 60" appears on the CD/Tuner display), plays the source you have selected for 60 minutes, and then the Unit turns off.
   - ☐ If you press any button while the DAILY Timer is being activated, the Unit will not turn off automatically after 60 minutes.

Before turning off the Unit

- ☐ If the source is tape:
  - Check that the tape direction is correct. This is important especially when Reverse Mode is off.
  - Deck B has priority, so if tapes are in both decks, the tape in Deck B plays first.
  - Set Reverse Mode on if you want to play both sides of the tape.
  - If you're not home at the designated time, be sure to set the volume level to minimum.

To change the DAILY Timer setting
Press the DAILY TIMER button twice ("DAILY" reappears) and make any changes you want.
To cancel the DAILY Timer setting
Press the DAILY TIMER button again so that "DAILY" goes off on the CD/Tuner display.

Setting the SLEEP Timer

Use the sleep timer to turn the Unit off after a certain number of minutes when it is playing. Setting this timer, you can fall asleep to music and know your Unit will turn off by itself rather than play all night.

❑ You can only set the Sleep Timer when the Unit is on and a source is playing.

SLEEP TIMER

To set the SIEEP Timer, follow this procedure:

1. With the CA-C550 on and a source playing, press the SLEEP TIMER button. The "SLEEP" indicator on the CD/Tuner display will start blinking.

SLEEP 10
SLEEP

2. Set the length of time you want the source to play before shutting off.
   ❑ Each time you press this button while the "SLEEP" indicator is blinking, it changes the number of minutes shown on the display in this sequence:

→ **10** → **20** → **30** → **60** → **90** → **120** → Sleep timer off → (back to the beginning)

When the number of minutes you want shows on the display, just wait 5 seconds until the indicator stops blinking, but remains lighted.

The Unit is now set to turn off after the number of minutes you set.

To change the SLEEP Timer setting
Press the SLEEP TIMER button until the number of minutes you want appears on the display.
To cancel the SLEEP Timer setting
Press the SLEEP TIMER button until the "SLEEP" indicator goes off on the display.
Turning off the Unit also cancels the SLEEP Timer.

Timer Priority

Since each timer can be set independently, you may wonder what happens if the settings overlap. Here are the priorities for each timer:

❑ The Recording Timer always has priority. This means that:
- If another timer is set to come on during a time the Recording Timer is operating, the other timer just won't come on at all, so you will always get the entire program on tape.
- If the Recording Timer is set to come on while another timer is being activated, the other timer will shut off 10 seconds before the Recording Timer is set to turn on, and the Recording Timer will then take over.

❑ The SLEEP Timer has priority over the DAILY Timer. This is important because if you set the SLEEP Timer to start before and then end after the DAILY Timer would start, the DAILY Timer doesn't come on. So if you want your alarm to go off as scheduled, be sure the SLEEP Timer shuts off before the DAILY Timer is set to turn on the Unit.

Adjusting the Brightness of the Display

TUNING/DIMMER

In stand-by mode, you can adjust the brightness of the clock display.
Press the TUNING/DIMMER > button makes the display brighter.
Press the TUNING/DIMMER < button makes the display dimmer.

Using the Remote Control

How to Use the Remote Control

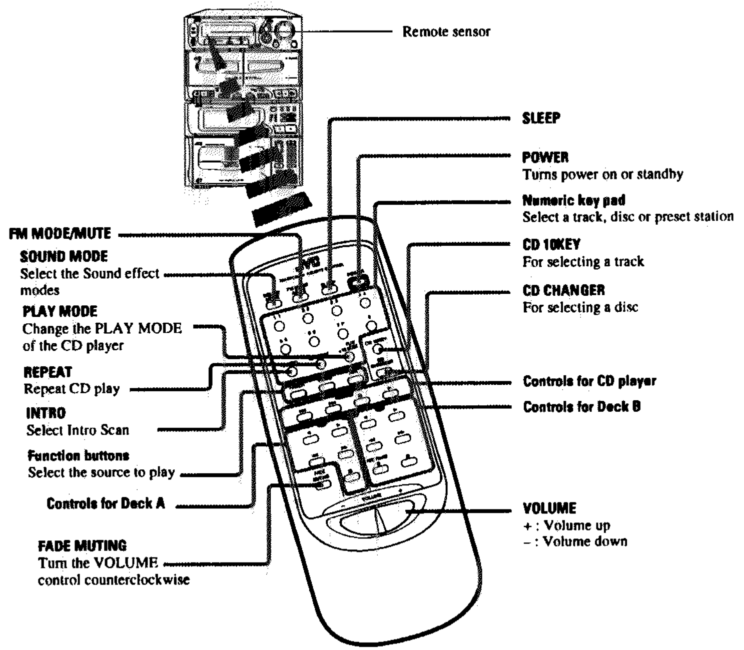
The Remote Control makes it easy to use many of the functions of the CA-C550 from a distance of up to 23 feet away. You do need to point the remote sensor at the CA-C550 front panel.

❑ Most of the buttons on the Remote Control do just what the ones on the CA-C550 do.
❑ A few functions are available only by using the Remote Control, as described below.

Using the Numeric Key Pad

The numeric key pad is used to specify a CD, a CD track or the number you have assigned to a preset radio station. To enter a number using the numeric key pad, follow these steps:

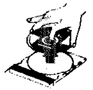
❑ Before using the numeric key pad, check to see whether the numeric key pad is functioning to operate the CD player or tuner. This depends on which button on the Remote Control you have pressed before using the numeric key pad. For example, if you press the TUNER button before the numeric key pad, it can select a preset station. Pressing the CD CHANGER button enables you to select a CD and also to operate the INTRO, REPEAT, and PLAY MODE buttons. If you press the CD 10KEY button, it can select a CD track.
❑ For numbers between 1 and 10, just press the button with the number you want.
❑ For numbers from 11 to 20, first press the +10 key, then the one digit of the number you want — to get 15, first press +10, then 5. For 20, press +10 and 10.
❑ For numbers from 21 to 30, press the +10 key twice; then press the one digit — to get 25, press +10 +10 and 5. For 30, +10 +10 and 10.
❑ For number from 31 to 40, press the +10 key three times, then the one digit of the number you want — to get 32, first press +10 +10 +10 and 2. For 40, press +10 +10 +10 and 10.


Remote sensor
SLEEP
POWER
Turns power on or standby
Numeric key pad
Select a track, disc or preset station
CD 10KEY
For selecting a track
CD CHANGER
For selecting a disc
Controls for CD player
Controls for Deck B
VOLUME
+ : Volume up
– : Volume down
FM MODE/MUTE
SOUND MODE
Select the Sound effect modes
PLAY MODE
Change the PLAY MODE of the CD player
REPEAT
Repeat CD play
INTRO
Select Intro Scan
Function buttons
Select the source to play
Controls for Deck A
FADE MUTING
Turn the VOLUME control counterclockwise

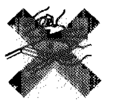
Care and Maintenance — General Notes

Compact Discs

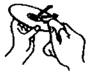
Handle your compact discs, cassette tapes, and cassette deck carefully, and they will last a long time.



- Remove the CD from the case by holding it at the edges while pressing the center hole lightly.
- Do not touch the shiny surface of the CD, or bend the CD.



- Put the CD back in its case after use to prevent warping.
- Be careful not to scratch the surface of the CD when placing it back in the case.
- Avoid exposure to direct sunlight, temperature extremes, and moisture.



- A dirty CD may not play correctly. If a CD does become dirty, wipe it with a soft cloth in a straight line, from center to edge.

CAUTION: Do not use any solvent (for example, conventional record cleaner, spray thinner, benzine, etc.) to clean a CD.

Moisture Condensation

Moisture may condense on the lens inside the Unit in the following cases:

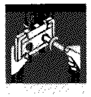
- After starting the heating in the room.
- In a damp room.
- If the unit is brought directly from a cold to a warm place.

Should this occur, the Unit may malfunction. In this case, leave the Unit turned on for a few hours until the moisture evaporates, unplug the AC power cord, and then plug it in again.

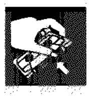
In general, you will have the best performance by keeping your tapes, CDs, and the mechanism clean.

- Store tapes and CDs in their cases, and keep them in cabinets or on shelves.
- Keep the cassette deck tape doors and the CD tray closed when not in use.

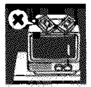
Cassette Tapes



- If the tape is loose in its cassette, take up the slack by inserting a pencil in one of the reels and rotating.
- If the tape is loose, it may get stretched, cut, or caught in the cassette.



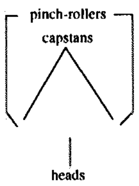
- Do not touch the tape surface.



- Do not store the tape:
  - In dusty places
  - In direct sunlight or heat
  - In moist areas
  - On a TV or speaker
  - Near a magnet

Cassette Deck

- If the heads, capstans, and pinch-rollers of the cassette deck become dirty, the following will occur:
  - Loss of sound quality
  - Discontinuous sound
  - Fading
  - Incomplete erasure
  - Difficulty recording
- Clean the heads, capstans, and pinch-rollers using a cotton swab moistened with alcohol.



- If the heads become magnetized, the Unit will produce noise or lose high frequencies.
- To demagnetize the heads, turn off the Unit, and use a head demagnetizer (available at electronics and record shops).

Troubleshooting

- If you are having a problem with your CA-C550, check this list for a possible solution before calling for service.
- If you cannot solve the problem from the hints given here, or the Unit has been physically damaged, call a qualified person, such as your dealer, for service.

Symptom	Possible Cause	ACTION
No sound is heard.	Connections are incorrect, or loose.	Check all connections and make corrections. (See pages 3 - 5.)
Unable to record.	Cassette record protect tabs are removed.	Cover holes on back edge of cassette with tape.
Poor radio reception.	The antenna is disconnected. The AM loop antenna is too close to the Unit. The FM wire antenna is not properly extended and positioned.	Re-connect the antenna securely. Change the position and direction of the AM loop antenna. Extend FM wire antenna to the best reception position.
The CD skips.	The CD is dirty or scratched.	Clean or replace the CD.
Unable to operate the Remote Control.	The path between the Remote Control and the sensor on the Unit is blocked. The batteries have lost their charge.	Remove the obstruction. Replace the batteries.
The CD tray cannot be operated.	The main AC power cord is not plugged in.	Plug in the AC power plug.
The CD does not play.	The CD is upside down.	Put the CD in with the label side up.
Operations are disabled.	The built-in microprocessor has malfunctioned due to external electrical interference.	Unplug the Unit then plug it back in.
The cassette door cannot be opened.	During tape playing, the power cord is unplugged.	Plug in the power cord and press the EJECT button.

Specifications

Amplifier/Cassette Deck Section

Amplifier

Output Power	**40 watts per channel, min. RMS, both channels driven, into 8 ohms from 40 Hz to 20 kHz, with no more than 0.9% total harmonic distortion.**
Input Sensitivity/Impedance (1 kHz)	
VIDEO	300 mV/47 kohms
AUX	300 mV/47 kohms

Cassette Deck

Frequency response	
Type II (CrO_2) :	30 - 16,000 Hz
Type I (NORMAL) :	30 - 15,000 Hz
Wow and flutter	0.09% (WRMS)
Dimensions	245 x 183 x 344 mm (W/H/D) (9-11/16 x 7-1/4 x 13-9/16 inches)
Weight	5.9 kg (13.0 lbs)

CD Automatic Changer/Tuner Section

CD Automatic Changer

CD capacity	7 discs
Dynamic Range	96 dB
Signal-to-Noise Ratio	102 dB
Wow and Flutter	Unmeasurable

Tuner

FM Tuner	
Tuning Range	87.5 - 108.0 MHz
AM Tuner	
Tuning Range	530 - 1,710 kHz
Dimensions	245 x 183 x 344 mm (W/H/D) (9-11/16 x 7-1/4 x 13-9/16 inches)
Weight	3.7 kg (8.2 lbs)

Power Specifications

Power Requirements	AC 120 V ∿ , 60 Hz
Power Consumption	120 watts

Design and specifications are subject to change without notice.

DX-C550

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Internal Connections of FL Display 2-7

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Adjustment Procedures 2-14

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Description of Major LSIs

■ MN171202J5T (IC950) : System controller

Terminal Layout

VDD	1	64	OSC1
S1	2	63	OSC2
S2	3	62	VSS
S3	4	61	X2
S4	5	60	X1
S5	6	59	
S6	7	58	
S7	8	57	JOG IN2
S8	9	56	JOG IN1
S9	10	55	ACO
10	11	54	SPK
S11	12	53	TU.RST
S12	13	52	D.RST
S13	14	51	STBY IND
S14	15	50	S.MUTE
S15	16	49	D.INH
VOL DOWN	17	48	DCS OUT
VPP	18	47	DCS IN
VOL UP	19	46	INH
1G KO0	20	45	RM IN
2G KO1	21	44	PRT IN
3G KO2	22	43	RST
3G KO3	23	42	S.OUT
5G	24	41	S.STB
6G	25	40	SCK
7G	26	39	LACH
8G	27	38	DTAO
9G	28	37	DTAI
10G	29	36	DSTB
11G	30	35	CSB
ABX IND	31	34	K11
VOL IND	32	33	K10

Key matrix

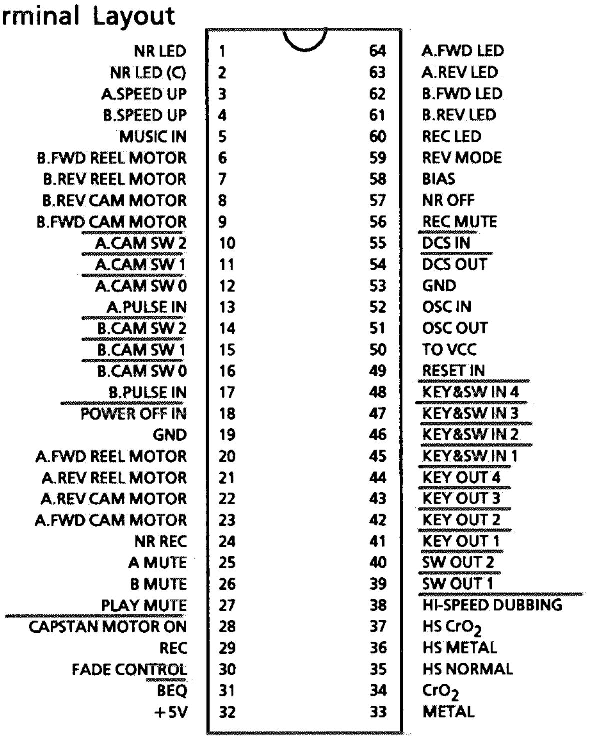
	KEY IN 0 (Pin33)	KEY IN 1 (Pin34)
SW OUT 1 (Pin20)	AUTO P.OFF	VOCAL MASKING
SW OUT 2 (Pin21)	ABX	STANDBY
KEY OUT 1 (Pin22)	SOUND EFECT	SEA CONTROL
KEY OUT 2 (Pin23)	VIDEO	AUX

Terminal Description

Pin NO.	Symbol	I/O	Function	Pin NO.	Symbol	I/O	Function
1	VDD	--	Power supply	33	KI0	O	Key matrix input
2	S1	O	FL segment control output	34	KI1	O	Key matrix input
3	S2	O	FL segment control output	35	CSB	O	Chip serect output to IC861(SPI BPF & D/A)
4	S3	O	FL segment control output	36	DSTB	O	Storoe output to IC861(SPI BPF & D/A)
5	S4	O	FL segment control output	37	DTAI	I	Data input from IC461(SPI B.P.F & D/A)
6	S5	O	FL segment control output	38	DTAO	O	Data output to IC461(SPI B.P.F & D/A)
7	S6	O	FL segment control output	39	LATCH	I	Storove signal to IC802
8	S7	O	FL segment control output	40	SCK	O	Clock output tosource select(IC801)
9	S8	O	FL segment control output	41	S.STB	O	Storoe output to source select(IC801)
10	S9	O	FL segment control output	42	S.OUT	O	Data output to source select(IC801)
11	S10	O	FL segment control output	43	RST	I	Reset signal input
12	S11	O	FL segment control output	44	PRT IN	I	Detection for protector
13	S12	O	FL segment control output	45	RM IN	I	Remort contorol signal input
14	S13	O	FL segment control output	46	INH	O	Inhibit signal for tuner controller
15	S14	O	FL segment control output	47	DCS IN	I	Compulink Signal input
16	S15	O	FL segment control output	48	DCS OUT	O	Compulink Signal out put
17	VOL DOWN	O	Main volume control	49	D.INH	O	Inhibit output to deck controller
18	VPP	--	-Power supply for FL display.	50	S.MUTE	O	Source muting
19	VOL UP	--	Main volume control	51	STBY IND	O	Indication control
20	1G KO0	O	Key matrix output/FL grid control output	52	D.RST	O	Reset signal to deck controller
21	2G KO1	O	Key matrix output/FL grid control output	53	TU.RST	O	Reset signal to tuner controller
22	3G KO2	O	Key matrix output/FL grid control output	54	SPK	O	Speaker relay control signal
23	4G KO3	O	Key matrix output/FL grid control output	55	ACO	O	Power supply control signal
24	5G	O	FL grid control output	56	JOG IN1	I	Music Jog pulse to input 1
25	6G	O	FL grid control output	57	JOG IN2	I	Music Jog pulse to input 2
26	7G	O	FL grid control output	58		--	Connected to GND
27	8G	O	FL grid control output	59		--	Connected to GND
28	9G	O	FL grid control output	60	X1	--	Connected to GND
29	10G	O	FL grid control output	61	X2	--	Not used
30	11G	O	FL grid control output	62	VSS	O	Connected to GND
31	ABX IND	O	Indication control	63	OSC2	O	Clock oscillation terminal
32	VOL IND	O	Indication control	64	OSC2	O	Clock oscillation terminal

■ HD614081SE39 (IC203) : Deck controller

Terminal Layout


NR LED
NR LED (C)
A.SPEED UP
B.SPEED UP
MUSIC IN
B.FWD REEL MOTOR
B.REV REEL MOTOR
B.REV CAM MOTOR
B.FWD CAM MOTOR
A.CAM SW 2
A.CAM SW 1
A.CAM SW 0
A.PULSE IN
B.CAM SW 2
B.CAM SW 1
B.CAM SW 0
B.PULSE IN
POWER OFF IN
GND
A.FWD REEL MOTOR
A.REV REEL MOTOR
A.REV CAM MOTOR
A.FWD CAM MOTOR
NR REC
A MUTE
B MUTE
PLAY MUTE
CAPSTAN MOTOR ON
REC
FADE CONTROL
BEQ
+5V
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
64
63
62
61
60
59
58
57
56
55
54
53
52
51
50
49
48
47
46
45
44
43
42
41
40
39
38
37
36
35
34
33
A.FWD LED
A.REV LED
B.FWD LED
B.REV LED
REC LED
REV MODE
BIAS
NR OFF
REC MUTE
DCS IN
DCS OUT
GND
OSC IN
OSC OUT
TO VCC
RESET IN
KEY&SW IN 4
KEY&SW IN 3
KEY&SW IN 2
KEY&SW IN 1
KEY OUT 4
KEY OUT 3
KEY OUT 2
KEY OUT 1
SW OUT 2
SW OUT 1
HI-SPEED DUBBING
HS CrO_2
HS METAL
HS NORMAL
CrO_2
METAL

Key matrix

	KEY IN 1 (Pin45)	KEY IN 2 (Pin46)	KEY IN3 (Pin47)	KEY IN4 (Pin48)
SW OUT 1 (Pin39)	—	B CrO_2	METAL	—
SW OUT 2 (Pin40)	BPACK	REV REC	FWD REC	APACK
KEY OUT 1 (Pin41)	A◀	A◀◀	A▶▶	A▶
KEY OUT 2 (Pin42)	B◀	B◀◀	B▶▶	B▶
KEY OUT 3 (Pin43)	A■	B■	REC PAUSE	–
KEY OUT 4 (Pin44)	A▶▶B	DOLBY	REV. MODE	CD REC

Terminal Description

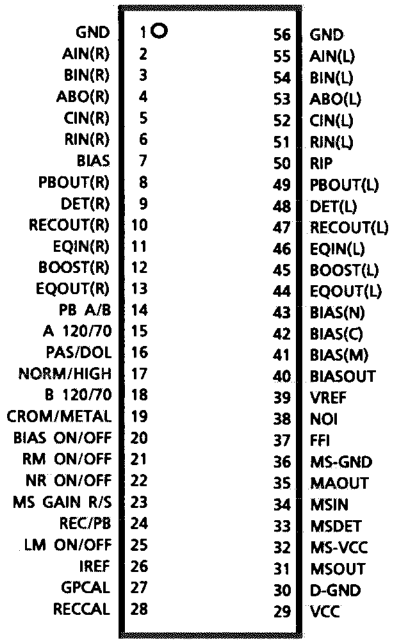
Pin NO.	Symbol	I/O	Function	Pin NO.	Symbol	I/O	Function
1	NR LED	O	Indication control for NR	33	METAL	O	Metal tape , normal speed record
2	NR LED(C)	O	Not used	34	CrO_2	O	CrO_2 tape , normal speed record
3	A S UP	O	Reel speed up control (Deck A)	35	HS NORM	O	Normal tape , high speed record
4	B S UP	O	Reel speed up control (Deck B)	36	HS METAL	O	Metal tape , high speed record
5	MUSIC IN	I	Music scan signal input	37	HS CrO2	O	CrO2 tape , high speed record
6	B F R M	O	Reel control signal for forward (Deck B)	38	/HI DUB	O	It is "L" when high speed dubbing
7	B R R M	O	Reel control signal for reverse (Deck B)	39	/SW O1	O	Keymatrix output for leaf switch
8	B R C M	O	Cam control signal for reverse (Deck B)	40	/SW O2	O	Keymatrix output for leaf switch
9	B F C M	O	Cam control signal for forward (Deck B)	41	/KEY O1	O	Key matrix output
10	/A C SW2	I	Cam data input	42	/KEY O2	O	Key matrix output
11	/A C SW1	I	Cam data input	43	/KEY O3	O	Key matrix output
12	/A C SW0	I	Cam data input	44	/KEY O4	O	Key matrix output
13	A.PULS IN	I	Reel pulse input from deck A	45	KEY/SW I1	I	Key matrix input
14	/B C SW2	I	Cam data input	46	KEY/SW I2	I	Key matrix input
15	/B C SW1	I	Cam data input	47	KEY/SW I3	I	Key matrix input
16	/B C SW0	I	Cam data input	48	/KEY/SW I4	I	Key matrix input
17	B.PULSE IN	I	Reel pulse input from deck B	49	RESET	I	Reset input
18	/P.CONT	I	Inhibit input from system controller	50	TO VCC	–	Connected to VCC
19	GND	--	GND	51	OSC	–	Oscillation terminal
20	A F R M	O	Reel control signal for forward (Deck A)	52	OSC	–	Oscillation terminal
21	A R R M	O	Reel control signal for reverse (Deck A)	53	GND	–	GND
22	A R C M	O	Cam control signal for reverse (Deck A)	54	/DCS OUT	O	Compulink output
23	A F C M	O	Cam control signal for forward (Deck A)	55	/DCS IN	I	Compulink input
24	NR REC	O	It is "H" when recording with NR on	56	REC MUTE	O	Recording mute control
25	A MUTE	O	It is "H" when deck A is not playing	57	NR OFF	O	NR on/off control
26	B MUTE	O	It is "H" when deck B is not playing	58	BIAS	O	Bias on/off control
27	PLAY MU	O	Deck mute	59	REV MODE	O	Indication control for reverse mode
28	/CAP CONT	O	Capstan on/off control	60	REC LED	O	Indication control for record
29	REC	O	It is "H" when recording	61	BREV LED	O	Indication control for reverse playback
30	FADE CON	O	It is "H" when recording with fade	62	BFWD LED	O	Indication control for forward playback
31	/BEQ	O	It is "L" when CrO2 tape is in deck B	63	AREV LED	O	Indication control for reverse playback
32	+5V	--	Power supply	64	AFWD LED	O	Indication control for forward playback

■ HA12171NT (IC304) : DOLBY NR & RECORD EQUALIZER

1. Outline

- Dolby B type NR
- Recoed equalizer
- Interval detection

2. Terminal Layout



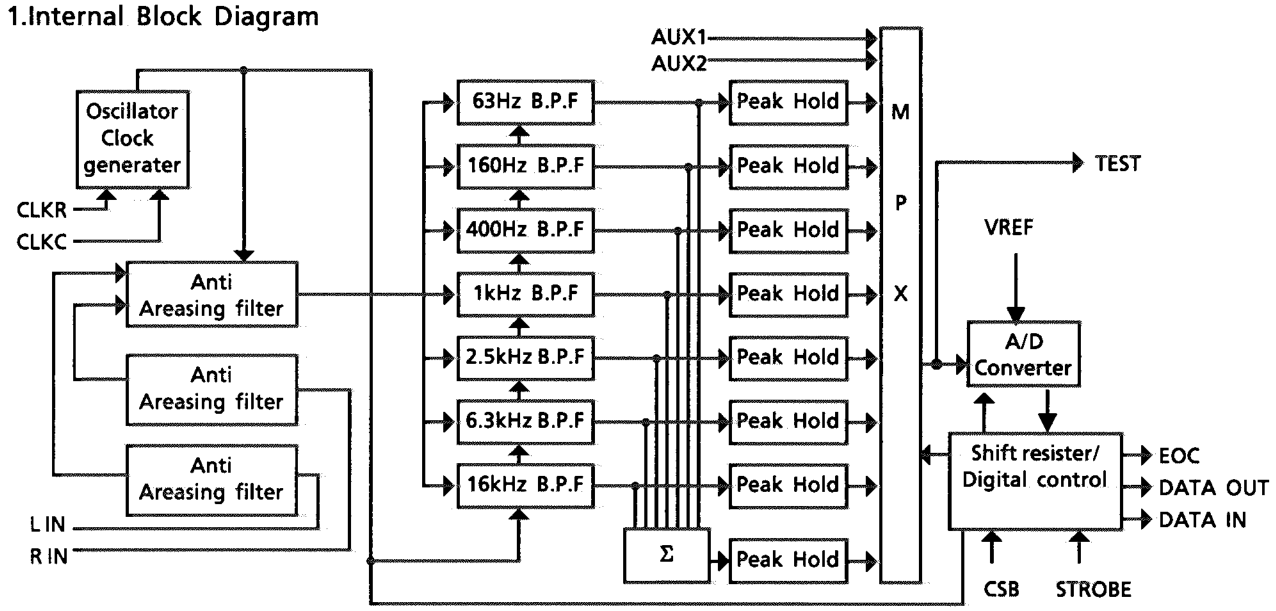
GND 1 — 56 GND
AIN(R) 2 — 55 AIN(L)
BIN(R) 3 — 54 BIN(L)
ABO(R) 4 — 53 ABO(L)
CIN(R) 5 — 52 CIN(L)
RIN(R) 6 — 51 RIN(L)
BIAS 7 — 50 RIP
PBOUT(R) 8 — 49 PBOUT(L)
DET(R) 9 — 48 DET(L)
RECOUT(R) 10 — 47 RECOUT(L)
EQIN(R) 11 — 46 EQIN(L)
BOOST(R) 12 — 45 BOOST(L)
EQOUT(R) 13 — 44 EQOUT(L)
PB A/B 14 — 43 BIAS(N)
A 120/70 15 — 42 BIAS(C)
PAS/DOL 16 — 41 BIAS(M)
NORM/HIGH 17 — 40 BIASOUT
B 120/70 18 — 39 VREF
CROM/METAL 19 — 38 NOI
BIAS ON/OFF 20 — 37 FFI
RM ON/OFF 21 — 36 MS-GND
NR ON/OFF 22 — 35 MAOUT
MS GAIN R/S 23 — 34 MSIN
REC/PB 24 — 33 MSDET
LM ON/OFF 25 — 32 MS-VCC
IREF 26 — 31 MSOUT
GPCAL 27 — 30 D-GND
RECCAL 28 — 29 VCC

3.Terminal Description

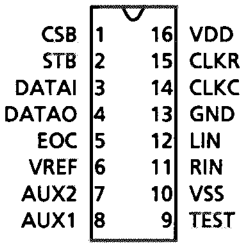
Pin No	Symbol	I/O	Function	Pin No	Symbol	I/O	Function
1	GND	--	Ground	29	VCC	--	Power supply
2	AIN(R)	I	Deck A playback input (Rch)	30	D-GND	--	Digital GND
3	BIN(R)	I	Deck B playback inpu (Rch)	31	MSOUT	O	Blunk scanning signal output
4	ABO(R)	O	Playback buffer out (Rch)	32	MS-VCC	--	Power supply
5	CIN(R)	I	70µ Buffer input (Rch)	33	MSDET	I	Time constancew setting for music scan
6	RIN(R)	I	Recording input(Rch)	34	MSIN	I	Input for music scan
7	BIAS	I	Connected to GND	35	MAOUT	O	Buffer AMP for music scan
8	PBOUT(R)	O	Playback output (Rch)	36	MS-GND	--	GND
9	DET (R)	I	NR time constance (Rch)	37	FFI	I	Feedback input for MS(FF,REW)
10	RECOUT(R)	O	Recording output (Rch)	38	NOI	I	Feedback input for MS
11	EQIN(R)	I	Input for recording equalizer (Rch)	39	VREF	--	Refference for music scan
12	BOOST(R)	I	Time constance for low boost (Rch)	40	BIASOUT	O	Recording bias control
13	EQOUT(R)	O	Equalizer output (Rch)	41	BIAS(M)	I	Bias current input for metal tape
14	PB A/B	I	Deck A/B select	42	BIAS(C)	I	Bias current input for CrO2 tape
15	A 120/70	I	Deck A playback EQ select	43	BIAS(N)	I	Bias current input for normal tape
16	PASS/DOL	I	Dolby signal path select(Through/pass)	44	EQOUT(L)	O	Equalizer output (Lch)
17	NORM/HIGH	I	Dubbing mode select	45	BOOST(L)	I	Time constance for low boost (Lch)
18	B 120/70	I	Deck B playback EQ select	46	EQIN(L)	I	Input for recording equalizer (Lch)
19	CROM/METAL	I	Tape select	47	RECOUT(L)	O	/Recording output (Lch)
20	BIAS ON/OFF	I	Bias ON/OFF control	48	DET(L)	I	NR time constance (Lch)
21	RM ON/OFF	I	Recording mute ON/OFF control	49	PBOUT(L)	O	Playback output(Lch)
22	NR ON/OFF	I	NR ON/OFF control	50	RIP	I	Ripple filter
23	MS GAIN R/S	I	Gain for music scan control	51	RIN(L)	I	Recording input (Lch)
24	REC/PB	I	Recording/Playback control	52	CIN(L)	--	70µ buffer input (Lch)
25	LM ON/OFF	I	Playback mute ON/OFF control	53	ABO(L)	O	Playback buffer out (Lch)
26	IREF	I	Reference current input	54	BIN(L)	I	Deck B playback input (Lch)
27	GPCAL	I	GP calibration	55	AIN(L)	I	Deck A playback input (Lch)
28	RECCAL	I	Recording gain calibration	56	GND	--	GND

■ XR1099(IC461) : 7-channel graphic equalizer filter with A/D converter

1.Internal Block Diagram


AUX1
AUX2
Oscillator Clock generater
CLKR
CLKC
Anti Areasing filter
Anti Areasing filter
Anti Areasing filter
L IN
R IN
63Hz B.P.F
160Hz B.P.F
400Hz B.P.F
1kHz B.P.F
2.5kHz B.P.F
6.3kHz B.P.F
16kHz B.P.F
Σ
Peak Hold
Peak Hold
Peak Hold
Peak Hold
Peak Hold
Peak Hold
Peak Hold
Peak Hold
M
P
X
TEST
VREF
A/D Converter
Shift resister/ Digital control
EOC
DATA OUT
DATA IN
CSB
STROBE

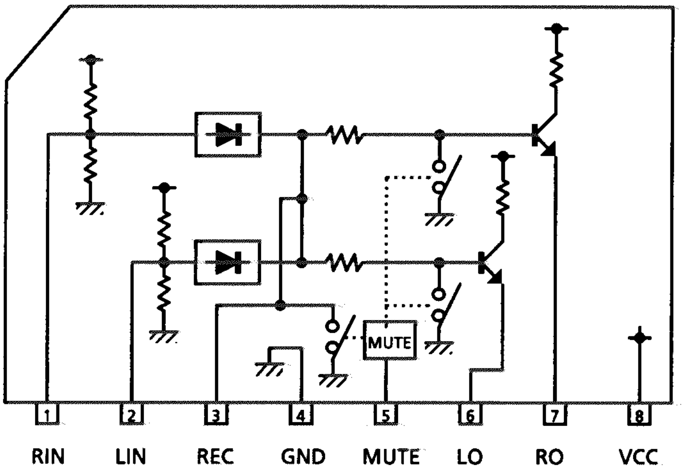
2.Terminal Layout


CSB 1
STB 2
DATAI 3
DATAO 4
EOC 5
VREF 6
AUX2 7
AUX1 8
16 VDD
15 CLKR
14 CLKC
13 GND
12 LIN
11 RIN
10 VSS
9 TEST

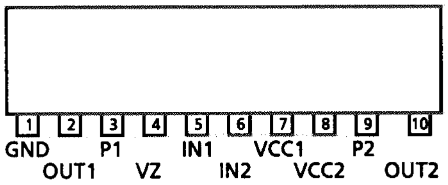
3.Terminal Description

Pin No	Symbol	I/O	Function	Pin No	Symbol	I/O	Function
1	CSB	I	Chip select	9	TEST	–	TEST Terminal
2	STB	I	Strobe signal	10	VSS	I	−5V
3	DATAI	I	Data input	11	RIN	I	Sound signal input
4	DATAO	O	Data output	12	LIN	I	Non connection
5	EOC	O	End of conversion	13	GND	–	GND
6	VREF	I	A/D converter reference voltage	14	CLKC	–	A capacitor is connected
7	AUX2	I	Non connection	15	CLKR	–	A resister is connected
8	AUX1	I	Non connection	16	VDD	–	+5V

■ BA8221AN (IC202) : ALC


MUTE
1
2
3
4
5
6
7
8
RIN
LIN
REC
GND
MUTE
LO
RO
VCC

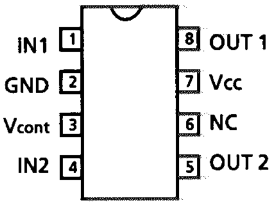
■ LB1641 (IC204~207) : DC Motor Driver

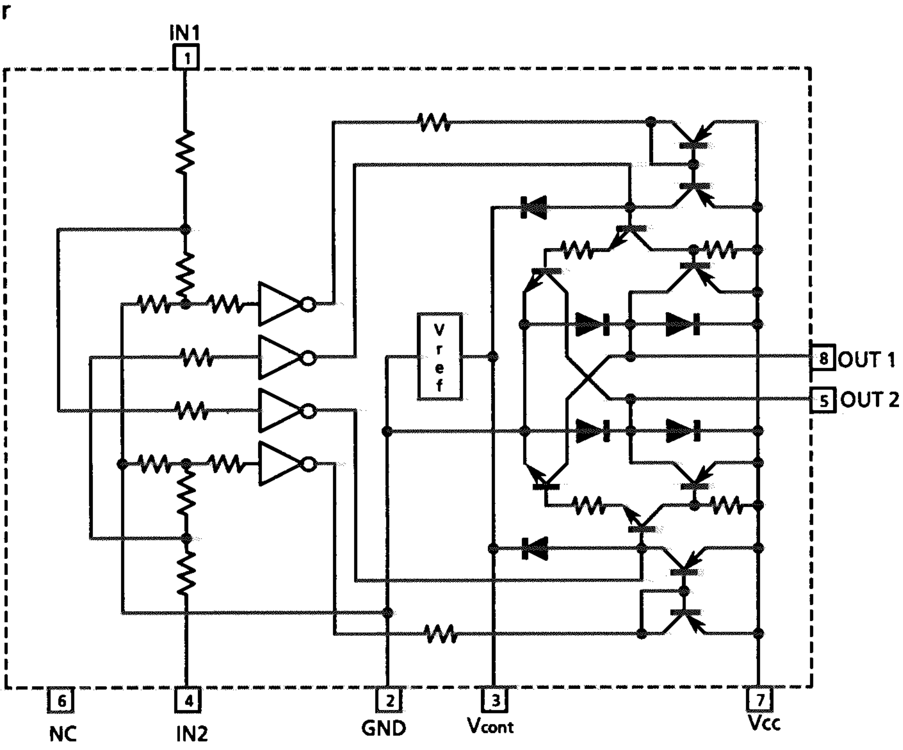

1
2
3
4
5
6
7
8
9
10
GND
OUT1
P1
VZ
IN1
IN2
VCC1
VCC2
P2
OUT2

Input		Output		Mode
IN1	IN2	OUT1	OUT2	
0	0	0	0	Brake
1	0	1	0	CLOCKWISE
0	1	0	1	COUNTER-CLOCKWISE
1	1	0	0	Brake

∞ : Hi impedance

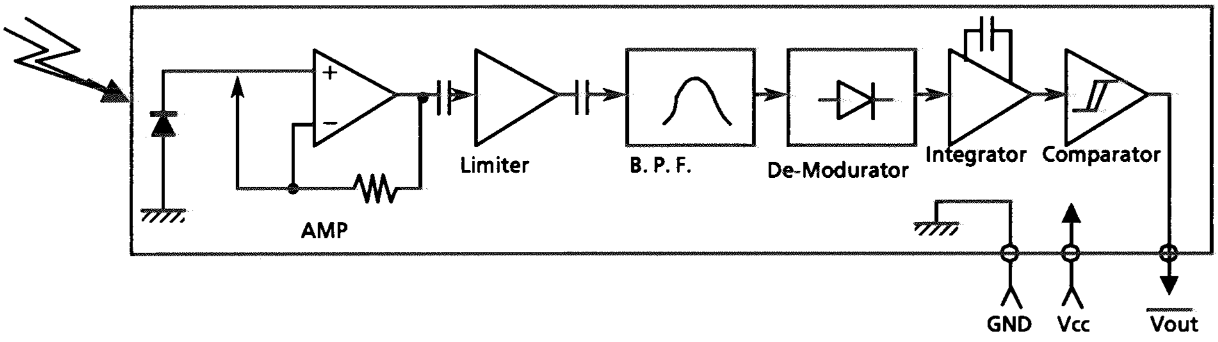
■ LB1639-CV (IC803) : Motor Driver


IN1 1
GND 2
Vcont 3
IN2 4
8 OUT 1
7 Vcc
6 NC
5 OUT 2


IN1
1
V
r
e
f
8 OUT 1
5 OUT 2
6
NC
4
IN2
2
GND
3
Vcont
7
Vcc

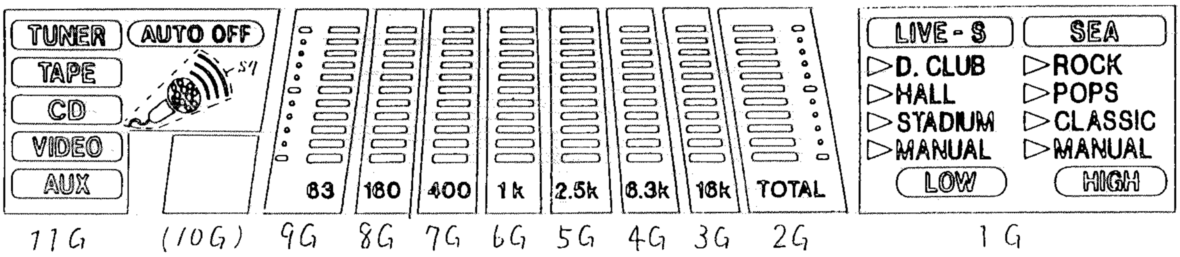
IN 1	IN 2	OUT 1	OUT 2	MOTOR
H	L	H	L	CLOCKWISE
L	H	L	H	COUNTER-CLOCKWISE
H	H	OFF	OFF	WAITING
L	L	OFF	OFF	WAITING

■ SPS-420-1 (IC902) : Remocon Module IC


+
−
AMP
Limiter
B. P. F.
De-Modurator
Integrator
Comparator
GND
Vcc
Vout

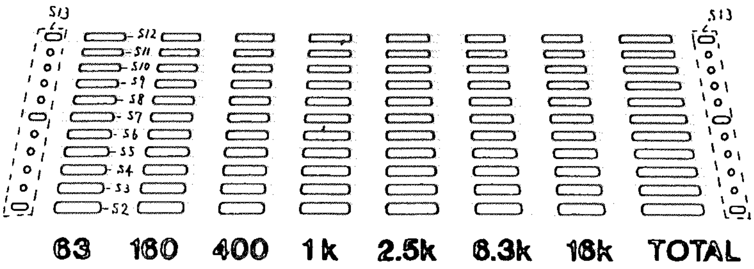
Internal Connections of the FL Display

■ **ELU0001-194 : FL950**


TUNER
AUTO OFF
TAPE
CD
VIDEO
AUX
S7
63
160
400
1k
2.5k
6.3k
16k
TOTAL
LIVE-S
SEA
▷D. CLUB
▷ROCK
▷HALL
▷POPS
▷STADIUM
▷CLASSIC
▷MANUAL
▷MANUAL
LOW
HIGH
11G
(10G)
9G
8G
7G
6G
5G
4G
3G
2G
1G

Anode Connection

	1G	2G	3G	4G	5G	6G	7G	8G	9G	10G	11G
S1	–	TOTAL	16K	6.3K	2.5K	1K	400	160	63	–	AUX
S2	▷(MANUAL R)	S2	S2	S2	S2	S2	S2	S2	S2	–	VIDEO
S3	▷(CLASSIC)	S3	S3	S3	S3	S3	S3	S3	S3	–	CD
S4	▷(POPS)	S4	S4	S4	S4	S4	S4	S4	S4	–	TAPE
S5	▷(ROCK)	S5	S5	S5	S5	S5	S5	S5	S5	–	TUNER
S6	–	S6	S6	S6	S6	S6	S6	S6	S6	–	AUTO OFF
S7	▷(MANUAL L)	S7	S7	S7	S7	S7	S7	S7	S7	–	S7
S8	▷(STADIUM)	S8	S8	S8	S8	S8	S8	S8	S8	–	–
S9	▷(HALL)	S9	S9	S9	S9	S9	S9	S9	S9	–	–
S10	▷(D.CLUB)	S10	S10	S10	S10	S10	S10	S10	S10	–	–
S11	SEA	S11	S11	S11	S11	S11	S11	S11	S11	–	–
S12	LIVE-S	S12	S12	S12	S12	S12	S12	S12	S12	–	–
S13	D.CLUB, HALL STADIUM, MANUAL ROCK, POPS CLASSIC, MANUAL	S13	–	–	–	–	–	–	S13	–	–
S14	LOW	–	–	–	–	–	–	–	–	–	–
S15	HIGH	–	–	–	–	–	–	–	–	–	–


S13
S12
S11
S10
S9
S8
S7
S6
S5
S4
S3
S2
S13
63
160
400
1k
2.5k
6.3k
16k
TOTAL

Pin Connection

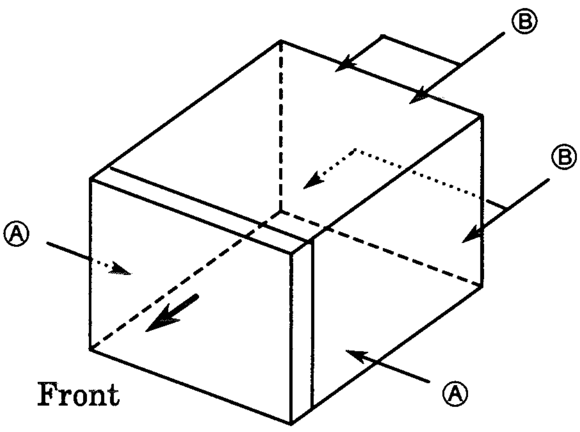
TERMINAL NO.	1	2	3	4	5	6	7	8	9	10	11									
ELECTRODE	F	F	F	NP	NP	11G	NC	9G	8G	7G	6G									
TERMINAL NO.	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
ELECTRODE	5G	4G	3G	2G	1G	NP	NP	NP	NP	NP	P s15	P s14	P s13	P s12	P s11	P s10	P s9	P s8	P s7	P s6
TERMINAL NO.											32	33	34	35	36	37	38	39	40	41
ELECTRODE											P s5	P s4	P s3	P s2	P s1	NP	NP	F	F	F

Notes F: Filament NP: No Pin
G: Grid NC: No Connection pin
P: Anode

Disassembly Procedures

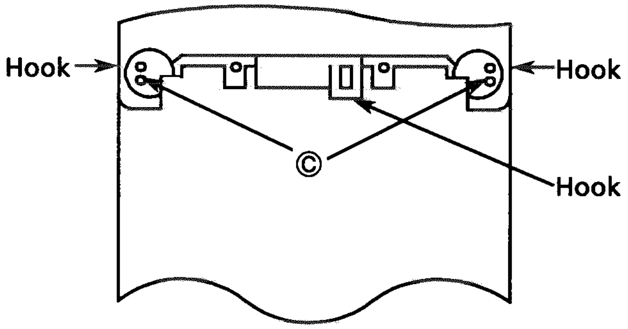
(1) Removing the top cover

1. Remove 6 screws Ⓐ and Ⓑ fastening the rear and sides of the top cover to remove the cover.



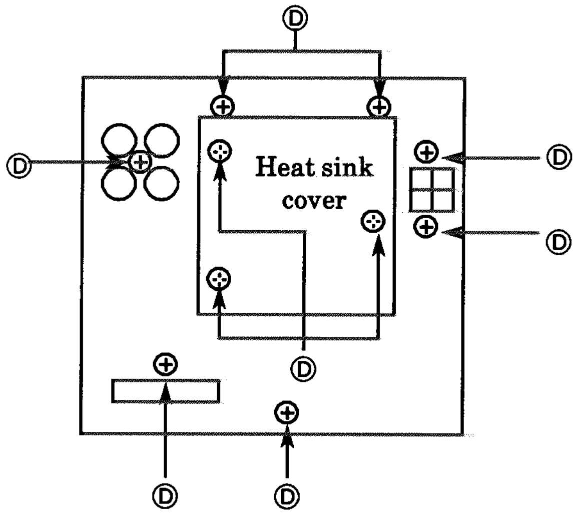
(2) Removing the Front panel assembly

1. Remove the top cover. (Refer to Item 1)
2. Pull out the main volume knob and remove the nut fixing the main volume.
3. Disconnect the connectors JB951, JB221, P901 and J511.
4. Remove 2 screws Ⓒ and 3 hooks fastening the assembly with chassis to remove the assembly.



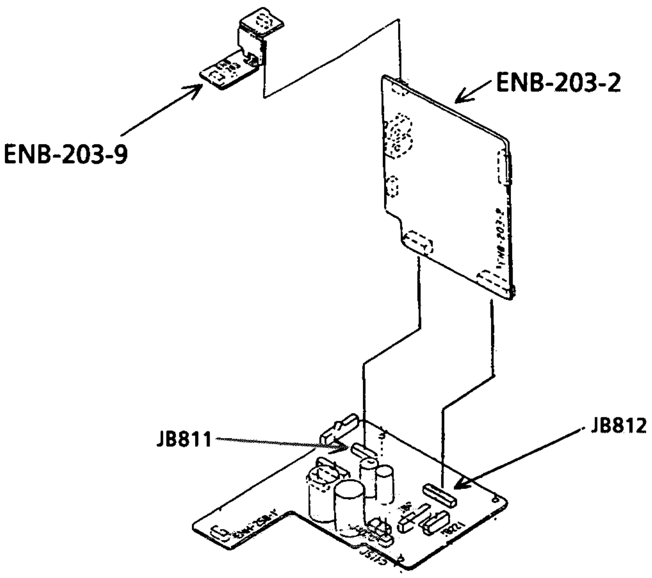
(3) Removing the rear panel

1. Remove the top cover. (Refer to Item 1)
2. Remove 2 screws Ⓓ to remove the heat sink cover.
3. Remove the heat sink cover.
4. Remove 8 screws Ⓓ fixing the rear panel to remove it.



(4) Removing External input circuit board. (ENB-203-2)

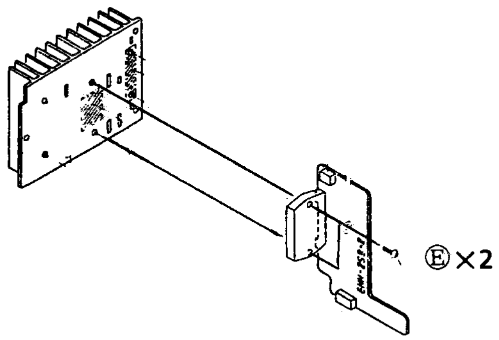
1. Remove the front panel assembly and rear panel. (Refer to Item 2 and 3)
2. Remove the junction circuit board (ENB-203-9).
3. Disconnect the connectors JB811 and JB812 to disassemble External input circuit board.



Ⓐ .. SDSG3006M   Ⓑ ... GBSG3008CC   Ⓒ ... SBST3008M   Ⓓ ... E73273-003

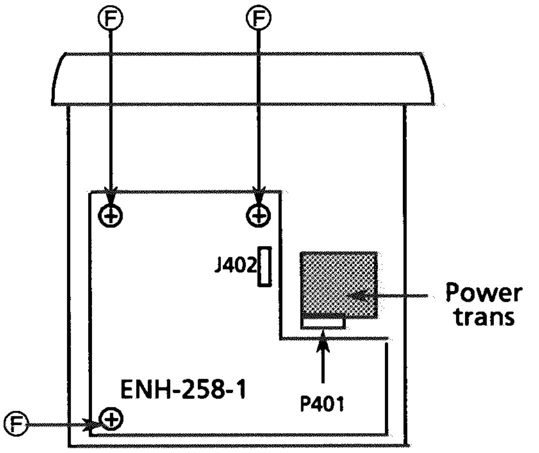
(5) Removing the Power IC

1. Remove the External input circuit board. (Refer to Item 4)
2. Remove the power amp circuit board (ENB-258-2,ENH-258-3) and regulator circuit board (ENH-258-1) with the heat sink.
3. Remove the each 2 screws Ⓔ fixing the power amp. ic.
4. Unsolder it.



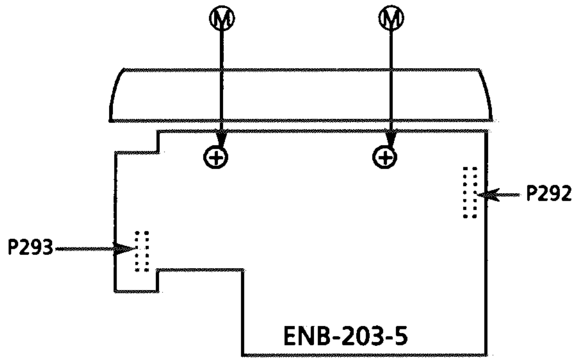
(6) Removing the Main circuit board (ENH-258-1)

1. Remove the power IC. (Refer to Item 5)
2. Remove the Speaker terminal circuit board (ENB-204-4).
3. Disconnect the connectors J402 and P401
4. Remove 3 screws Ⓕ fixing the circuit board.
5. Remove the Main circuit board.



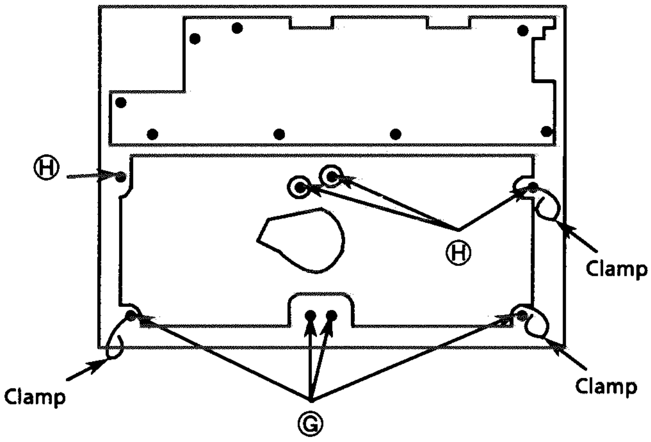
(7) Removing the Deck control circuit board (ENB-203-5)

1. Remove the main volume assembly.
2. Disconnect the connectors P292 and P293.
3. Remove the 2 screws Ⓜ fixing the circuit board.
4. Remove the Deck control circuit board.



(8) Removing the mechanism assembly

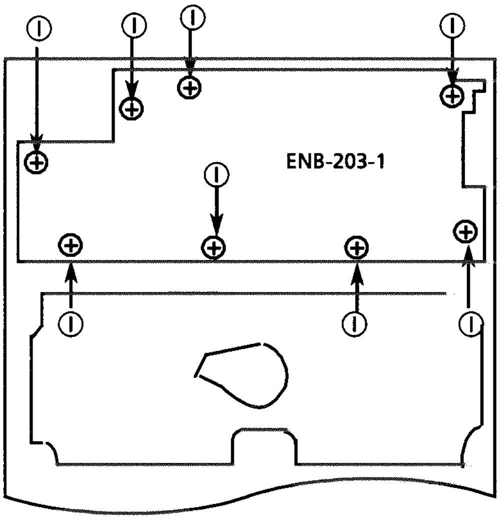
1. Remove the Deck control circuit board. (Refer to Item 7)
2. Remove the 8 screws Ⓖ and Ⓗ to remove the assembly.



Ⓔ SBSG3014CC Ⓕ GBSG3008CC Ⓖ SBST3006Z Ⓗ SBSF3008Z Ⓜ SPST2004Z

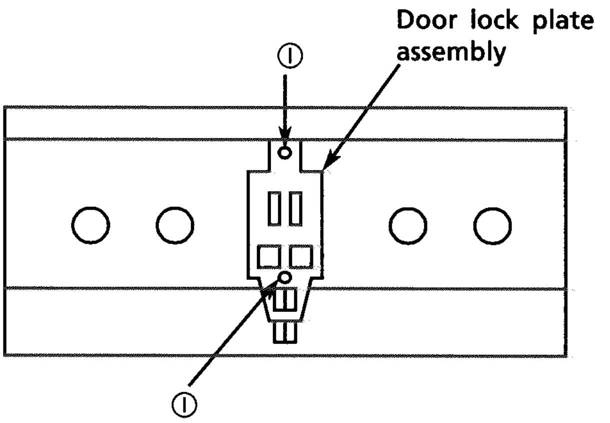
(9) Removing the front circuit board (ENB-203-1)

1. Remove the jog volume knob, music jog knob and balance knob.
2. Remove 8 screws ① to remove the front circuit board.


①
①
①
①
ENB-203-1
①
①
①
①
①

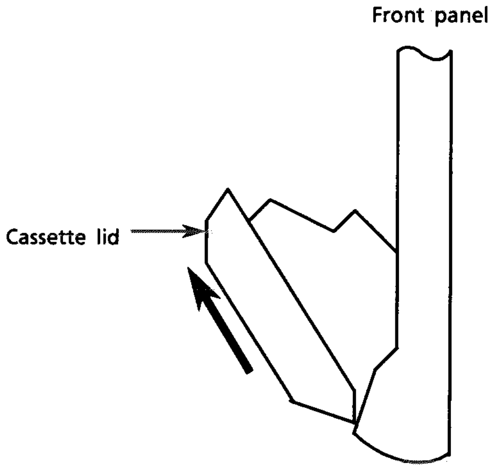
(10) Removing the door lock plate assembly

1. Remove the mechanism assembly. (Refer to Item 8)
2. Remove the 2 screws ① fixing the assembly.
3. Open the cassette doors to remove the assembly.


Door lock plate assembly
①
①

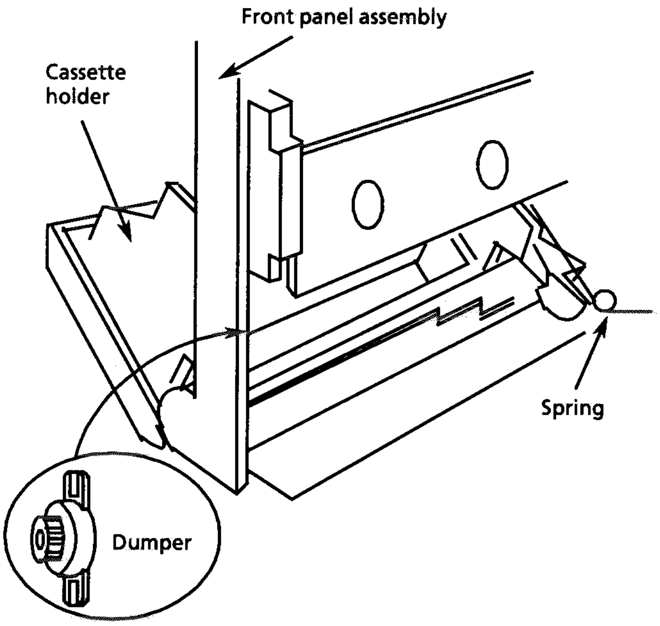
(11) Removing the cassette lids

1. Push the eject button to open the cassette doors.
2. Slide the lids up to remove them.


Front panel
Cassette lid

(12) Removing the Cassette holder

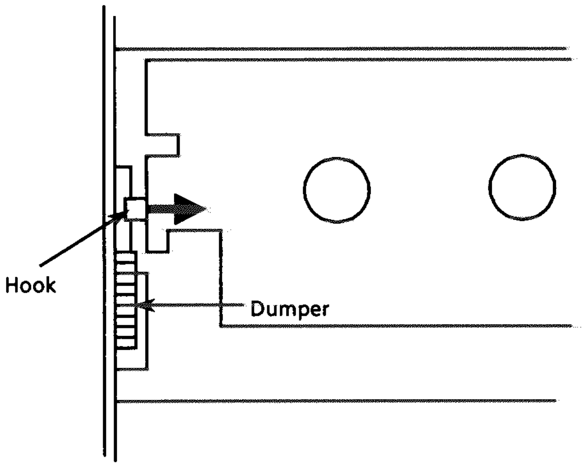
1. Remove the mechanism assembly. (Refer to Item 8)
2. Open the cassette door.
3. Remove the spring.
4. Remove the cassette holder.


Front panel assembly
Cassette holder
Spring
Dumper

① .. SDSF2608Z

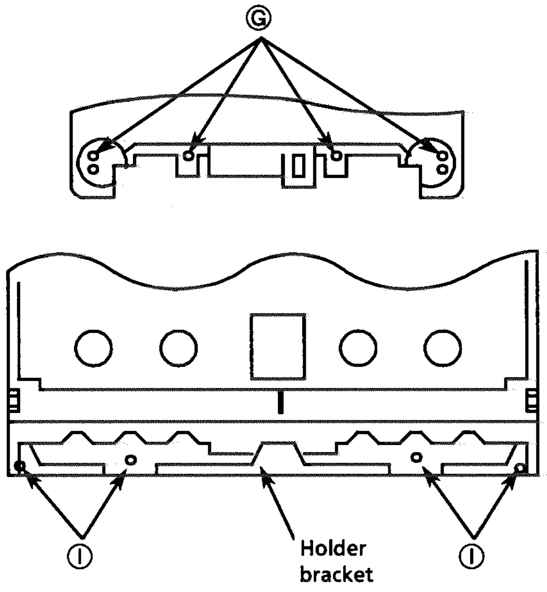
(13) Removing the dumpers

1. Remove the mechanism assembly. (Refer to Item 8)
2. Remove the cassette holder. (Refer to Item 12)
3. Press the hook and release it to remove the dumper. (See an arrow)


Hook
Dumper

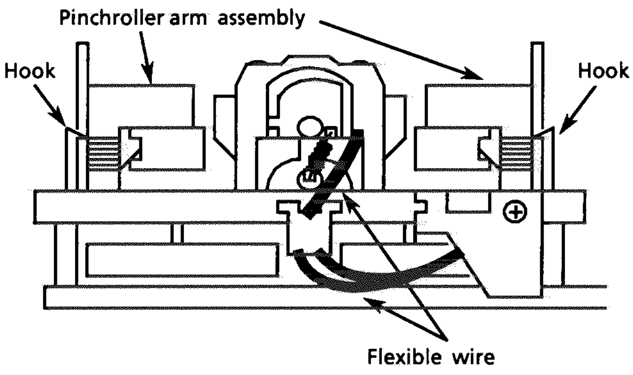
(14) Removing the Front SW circuit board (ENB-204-6)

1. Remove the cassette holders. (Refer to Item 12)
2. Remove the door lock plate assembly. (Refer to Item 10)
3. Remove the 4 screws Ⓖ to remove the holder bracket fixing the SW circuit board.
4. Remove 4 screws Ⓘ to remove the circuit board.


Ⓖ
Ⓘ
Holder bracket
Ⓘ

(15) Removing the pinchroller arm assembly

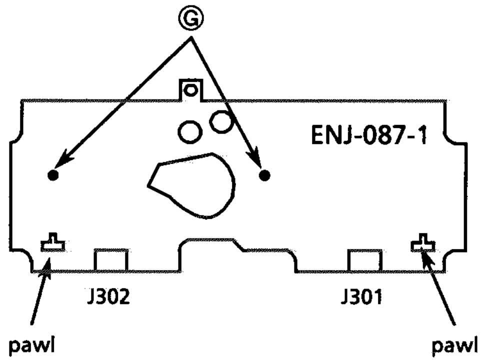
1. Remove the mechanism assembly. (Refer to Item 8)
2. Release the hook holding the assembly to remove it.


Pinchroller arm assembly
Hook
Hook
Flexible wire

Bottom view of the mechanism

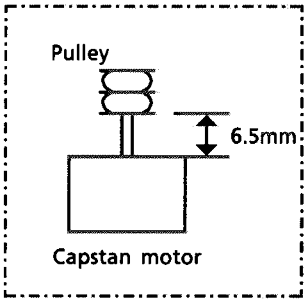
(16) Removing the deck audio circuit board (ENJ-087-1)

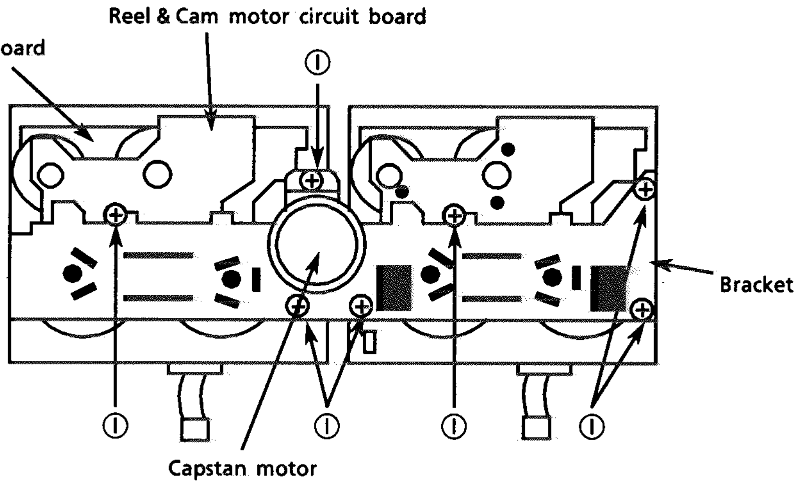
1. Remove mechanism assembly. (Refer to Item 8)
2. Disconnect J301 and J302.
3. Remove the 2 screws Ⓖ to remove the circuit board. (Pay attention to the pawls.)


Ⓖ
ENJ-087-1
J302
J301
pawl
pawl

(17) Removing the capstan motor

1. Remove the deck audio circuit board. (Refer to Item 16)
2. Remove the 7 screws Ⓘ fixing the bracket.
3. Release the hooks holding the bracket to remove the bracket with the capstan motor.
4. Remove the 2 screws fixing the motor to remove it.

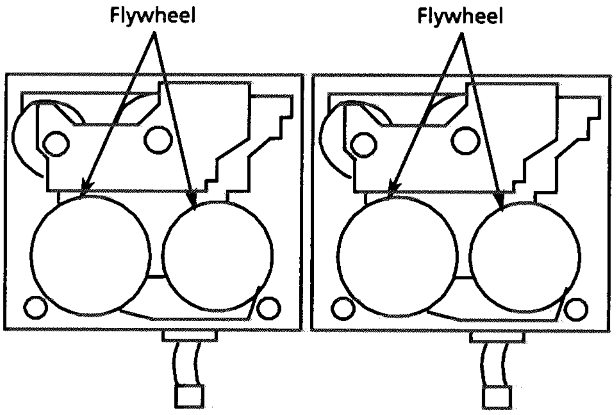

Pulley
6.5mm
Capstan motor


Reel & Cam motor circuit board
Cam switch circuit board
Ⓘ
Bracket
Ⓘ
Ⓘ
Ⓘ
Ⓘ
Capstan motor

Behind of the mechanism

(18) Removing the Flywheels

1. Remove the deck audio circuit board. (Refer to Item 16)
2. Remove the 7 screws Ⓘ and release the hooks holding the bracket to remove the bracket with the capstan motor.
3. Remove the flywheel.

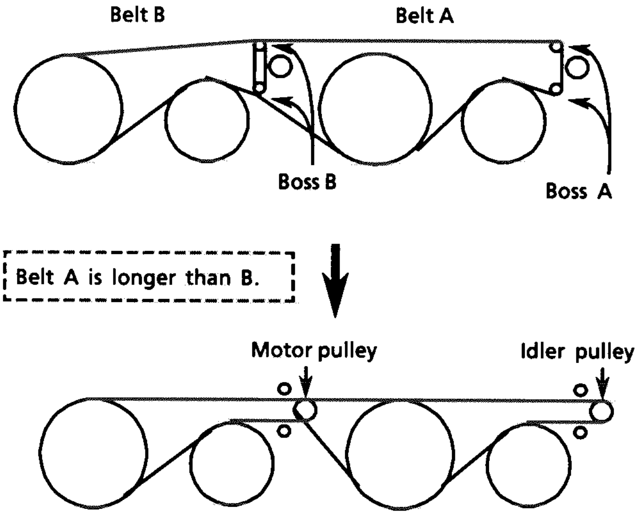

Flywheel
Flywheel

Behind of the mechanism

(19) How to install the belts

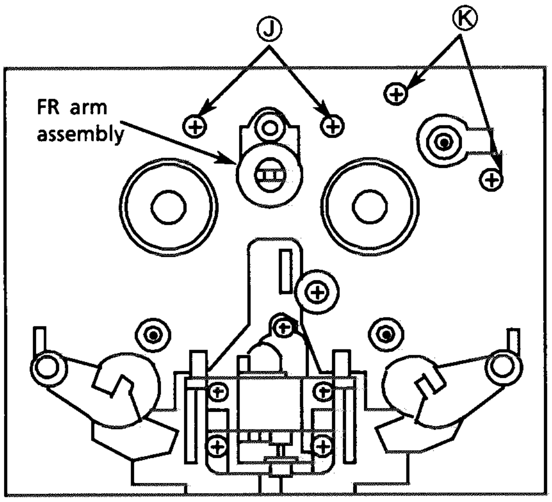
1. Install the belts as shown in the figure below.

   When putting the belts, put the belt B first.
2. Install the bracket with the capstan motor to put the belts on the pulleys.


Belt B
Belt A
Boss B
Boss A
Belt A is longer than B.
Motor pulley
Idler pulley

(20) Removing the reel & cam motor

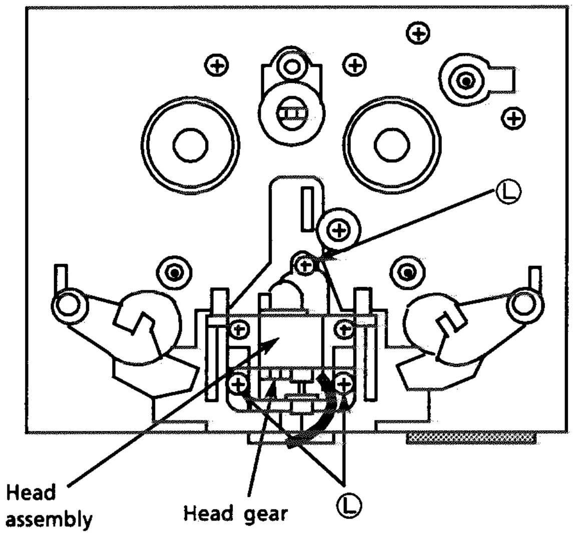
1. Remove the flywheel.
   (Refer to Item 18)
2. Remove the screws Ⓙ and Ⓙ fixing the motors to remove the reel & cam motor circuit board.
3. Unsolder the motors to remove them.


Ⓙ
Ⓚ
FR arm assembly

Front view of the mechanism

(22) Removing the head assembly

1. Remove the mechanism assembly.
   (Refer to Item 8)
2. Disconnect the connector P331 or P333 on the deck audio circuit board. (Refer to Item 16)
3. Remove the 3 screws Ⓛ fixing the head assembly to remove it.

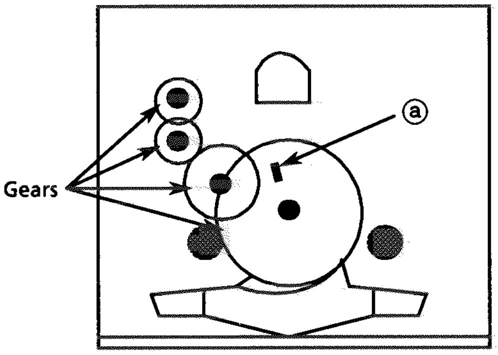

Ⓛ
Head assembly
Head gear
Ⓛ

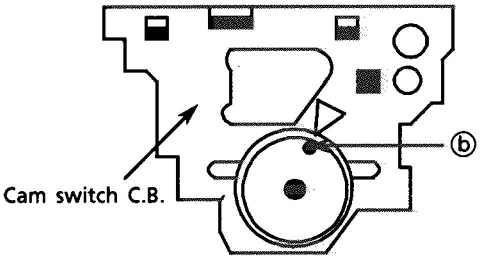
Front view of the mechanism

(21) Removing the cam switch circuit board

1. Remove the flywheel.
   (Refer to Item 18)
2. Remove the reel & cam motor circuit board.
3. Release the hook holding the cam switch circuit board and remove the screw to remove it.

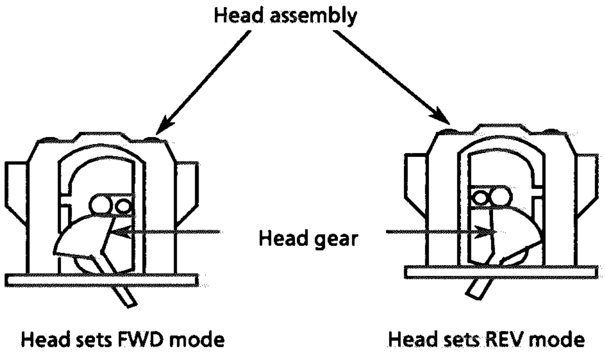
※ When installing the cam switch circuit board, assemble the circuit board so that the part ⓐ meets part ⓑ.




ⓑ
Cam switch C.B.

(23) Installing the head assembly

The direction of the head is changed with the head gear. When servicing, install the head gear according to the direction of the head.


Head assembly
Head gear
Head sets FWD mode
Head sets REV mode

Ⓙ .. VKZ4705-001 Ⓚ ... VKZ4705-002 Ⓛ ... SDST2004Z

Adjustment Procedures

■ Deck adjiustment point

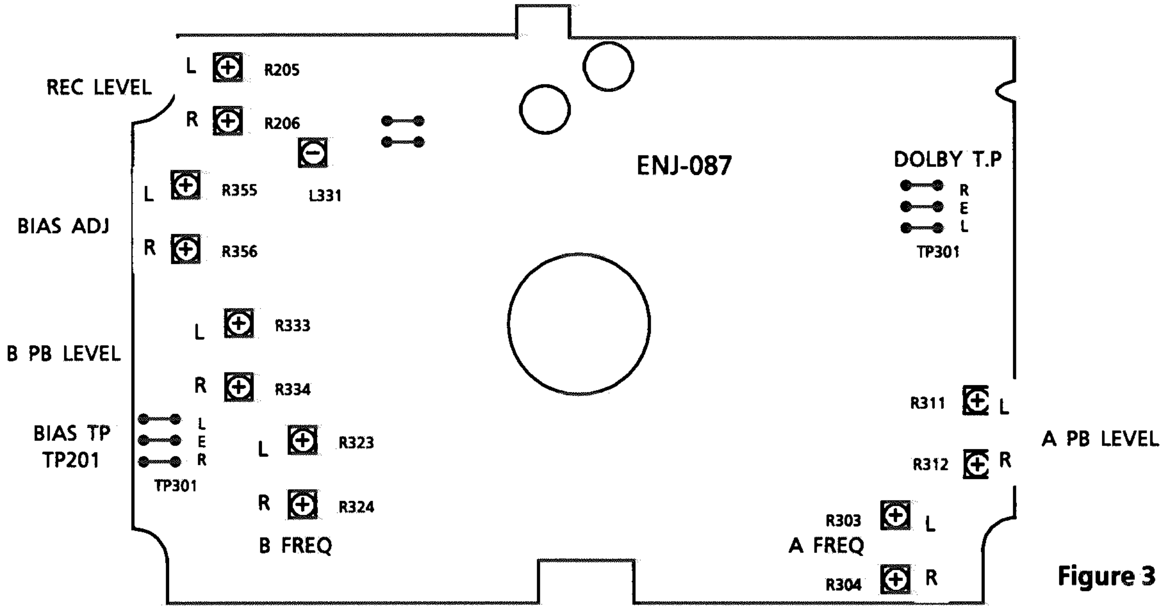

REC LEVEL
L R205
R R206
L331
ENJ-087
DOLBY T.P
R
E
L
TP301
BIAS ADJ
L R355
R R356
B PB LEVEL
L R333
R R334
BIAS TP
TP201
L
E
R
TP301
L R323
R R324
B FREQ
R311 L
R312 R
A PB LEVEL
R303 L
A FREQ
R304 R

Figure 3

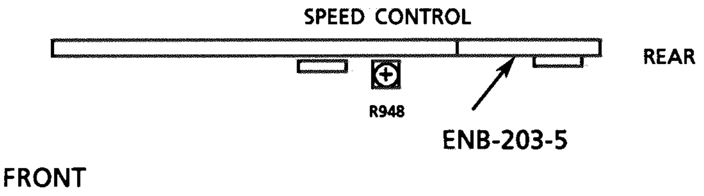

SPEED CONTROL
REAR
R948
ENB-203-5
FRONT

Figure 4

1. Measuring instruments

Audio frequency signal generator (0dbs output at the 600 ohm output terminal from 50Hz to 20KHz)
Electronic voltmeter
Frequency counter
Wow & Flutter meter
Distortion Meter with band pass filter
Attenuator (600 ohm impedance)
A resistor with 600Ω

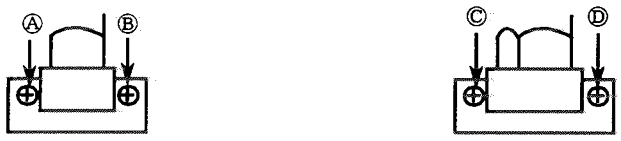
Standard Tape

0dBs=0.775V

Tape No.	Frequency	Level (Wow & Flutter)	Purpose
VTT-703L	10kHz	−10dBs	Head azimuth , Frequency Response
VTT-712	3000Hz	0dBs 0.025%WRMS	Tape Speed , Wow & Flutter
VTT-724	1kHz	−4dBs	Standard Level
TMT-6447	—	—	Blunk Skip
TMT-6247 , TMT-6237	—	—	Music Scan
TS-8	—	—	Recording standard Normal : UR
TS-11	—	—	Recording standard METAL :MA
TS-10	—	—	Recording standard CrO_2 : SA
GTG-N (CT-100M)	—	—	Forward / reverse play torque measuring
TW-2231	—	—	Feed forward / rewind torque measuring
C-120 Tape	—	—	Comfirming the tape running

2. Adjustment and repairing the mechanism

Item	Adjustment method	Standard value	Remarks
Head azimuth	Deck A 1. Connect an electronic voltmeter to the DOLBY TP(figure 1) to playback VTT-703L. 2. Adjust screw Ⓐ so that the indication of the voltmeter becomes maximum when PLAY (▶) is pressed. 3. Adjust screw Ⓑ so that the indication of the voltmeter becomes maximum when PLAY (◀) is pressed. Deck B 4. Adjust screw Ⓒ so that the indication of the voltmeter becomes maximum when PLAY (▶) is pressed. 5. Adjust screw Ⓓ so that the indication of the voltmeter becomes maximum when PLAY (◀) is pressed. 6. After making the adjustment,apply screw lock to prevent screws Ⓐ, Ⓑ, Ⓒ and Ⓓ coming loose.	Maximum	1. **Refer to figure 5.** 2. When the specified characteristic cannot be obtained because of head wear, excessive magnetization, etc., replace the head assembly and adjust the head azimuth. Also, perform the electric adjustment. 3. When there is the difference of more than 3 ~ 4 dB between left and right output levels, replace the head assembly to avoid complaints.
Playback torque	1. Measure the torque in the playback mode by the torqu meter.	26 ~ 62 g-cm	When the standard torque cannot be obtained, replace the FR arm assembly or motor.
Fast forward torque	1. Measure the torque in the fast forward mode by the torqu meter.	80 ~ 170 g-cm	When the standard torque cannot be obtained,replace the FR arm assembly or motor.
Wow & flutter	1. Connect the wow & flutter meter to the DOLBY TP(figure 1) and play back VTT-712. 2. Its reading should be within 0.2% (WRMS).	Less than 0.2%	As a complaint may occur if the wow & flutter fluctuates by 0.1% even though it is allowed in the standard, repairing is required.
Auto stop			



Deck A

Deck B

Figure 5

3. Electrical Adjustments (Make the following adjustments after adjusting the head azimuth.)

In principle, the adjustments should be made in the following sequence.

Set the NR switch to OFF and the BEAT CUT switch to "1".

Adjustments marked with an asterisk (*) should always be made after the head is replaced

0dBs = 0.775V

	Item	Adjustment Method	Adjustment Location	Standard Value	Remarks
1	Tape Speed	1. Connect a frequency counter to the DOLBY TP(figure 1) and play back VTT-712. 2. Normal speed Adjustment 1) Mechanism B Play back deck B to adjust the semi-fixed resistor R948. 2) Mechanism A Play back deck A to confirm that the difference between deck A and deck B is within ±51Hz.	R948	3,000 Hz ±10Hz	1) Adjust the normal speed first, and perform the high speed adjustment.

	Item	Adjustment Method	Adjustment Location	Standard Value	Remarks
* 2	Standard level (Playback Level)	1. Connect an electronic voltmeter to the DOLBY TP (figure 1). Play back VTT-724 (1 kHz : −4dBs) to adjust the semi-fixed resistors.	**Deck A** L: R311 R: R312 **Deck B** L: R333 R: R334	−5.5dBs (411mV) ±1dB	1) The playback level varies when the head is replaced so should be adjusted. Use an electronic voltmeter with an impedance of 100 kΩ or more.
* 3	Playback Frequency Response	1. Connect an electronic voltmeter to the DOLBY TP (figure 1). 2. Play VTT-703L (10kHz : −10dBs) and adjust semi-fixed resistors to obtain the standard values.	**Deck A** L: R303 R: R304 **Deck B** L: R323 R: R324	−11.5dBs (206mV) ±3dB	—
* 4	Recording Bias Frequency	1. Connect a frequency counter to the BIAS TP(figure 1), and perform a recording to adjust bias frequency.	L331	100 kHz +10kHz -5kHz	—
* 5	Record / Play Frequency Response (Bias current)	1. Supply 1kHz and 12.5kHz with 30mV signals to PHONO/AUX terminals respectively to record them. 2. Connect an electronic voltmeter to the DOLBY TP (figure 1) to confirm the recorded values. 3. If the values are not satisfied, adjust the semi-fixed resistors and record the signal again to confirm the recorded values.	L : R355 R : R356	0±2 dB with 1 kHz as the standard.	**Refer to figure 6 below.** 1) The recording and playback frequency response of a cassette deck are adjusted by adjusting the bias. 2) Perform the adjustment with normal tape and confirm that the values are within the range for metal tape.
* 6	Record / Playback Sensitivity	1. Input a 1 kHz (−8.2dBs: 300mV) signal to PHONO / AUX terminals and record it on the left and right channels . 2. Connect an electronic voltmeter to the DOLBY TP (figure 1) to confirm the recorded values. 3. If the values are not satisfied, adjust the semi-fixed resistors and record the signal again to confirm the recorded values.	L : R205 R : R206	−5.5dBs (411mV) ±1dB	Adjust with normal tape and make sure that the left / right level difference is 1.0dB or less
* 7	Erase ratio check	1. Record a music source using the Metal tape. 2. Rewind and erase the recorded section. 3. Comfirm nothing can be heard.	—	—	—
* 8	Music Scan	1. Make sure not to work the music scanning operation at the start of tape wind using TMT-6237. 2. Make sure to work the music scanning operation at the end of tape wind using TMT-6247.	—	—	—

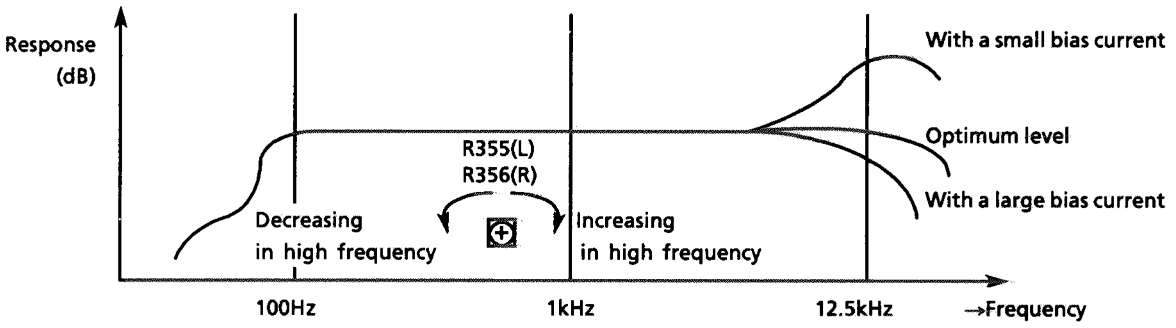
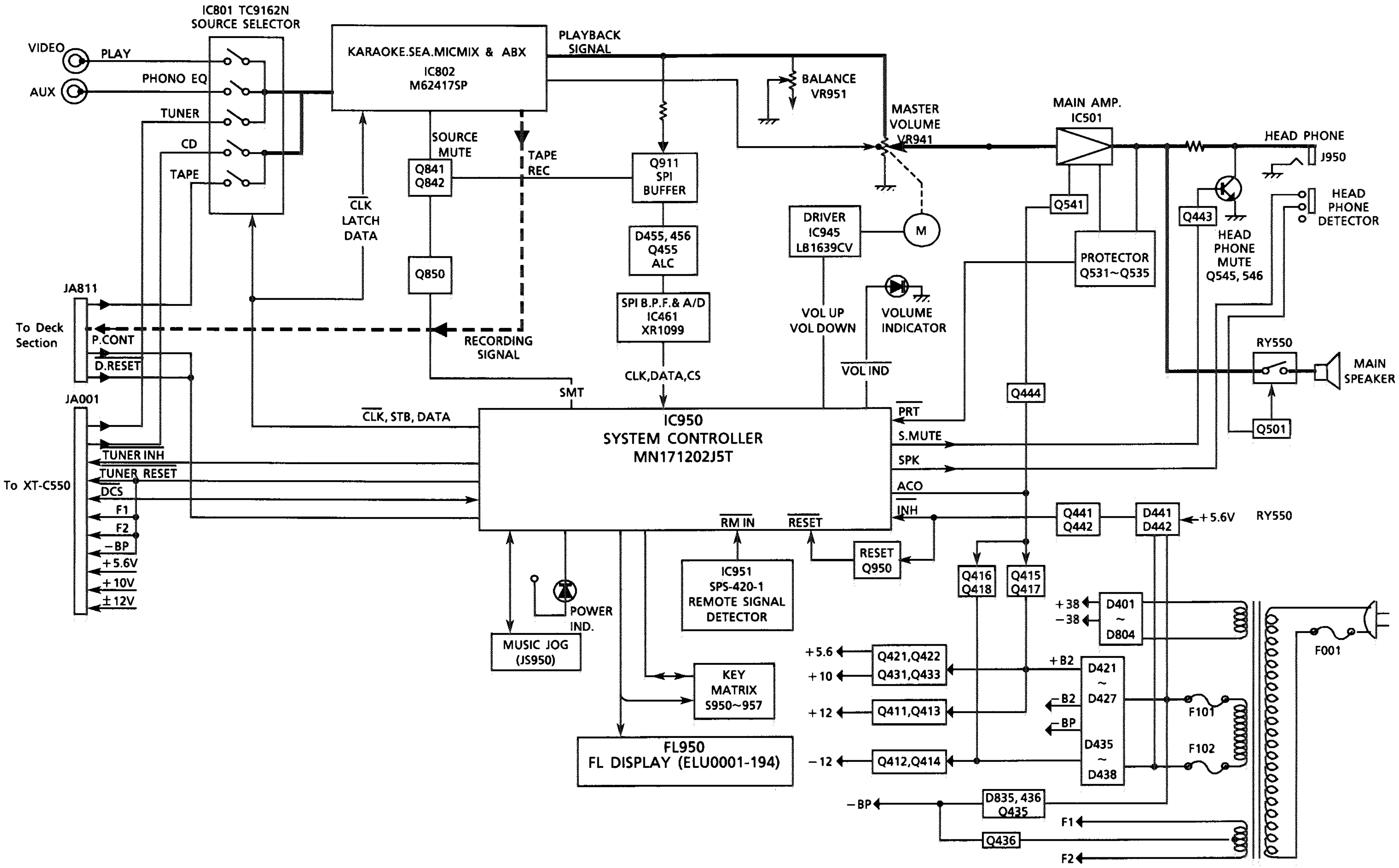
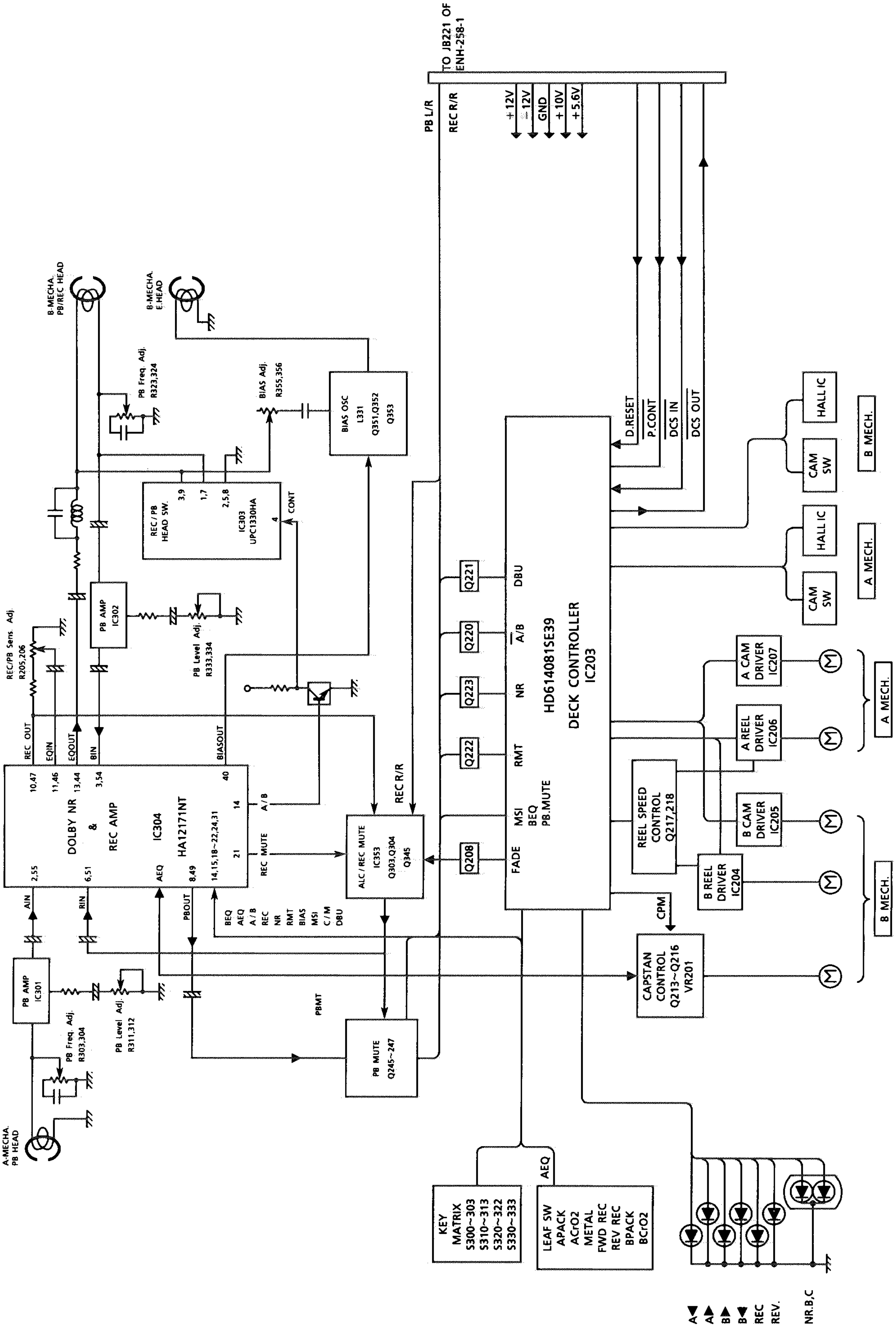


Figure 6

■ System Control Section


IC801 TC9162N
SOURCE SELECTOR
VIDEO
PLAY
AUX
PHONO EQ
TUNER
CD
TAPE
KARAOKE.SEA.MICMIX & ABX
IC802
M62417SP
PLAYBACK
SIGNAL
SOURCE
MUTE
Q841
Q842
TAPE
REC
CLK
LATCH
DATA
Q850
RECORDING
SIGNAL
Q911
SPI
BUFFER
D455, 456
Q455
ALC
SPI B.P.F.& A/D
IC461
XR1099
CLK,DATA,CS
BALANCE
VR951
MASTER
VOLUME
VR941
DRIVER
IC945
LB1639CV
M
VOL UP
VOL DOWN
VOLUME
INDICATOR
VOL IND
MAIN AMP.
IC501
Q541
PROTECTOR
Q531~Q535
Q443
HEAD
PHONE
MUTE
Q545, 546
HEAD PHONE
J950
HEAD
PHONE
DETECTOR
RY550
MAIN
SPEAKER
Q501
Q444
JA811
To Deck
Section
P.CONT
D.RESET
JA001
To XT-C550
TUNER INH
TUNER RESET
DCS
F1
F2
−BP
+5.6V
+10V
±12V
SMT
CLK, STB, DATA
IC950
SYSTEM CONTROLLER
MN171202J5T
PRT
S.MUTE
SPK
ACO
INH
RM IN
RESET
Q441
Q442
D441
D442
+5.6V
RY550
RESET
Q950
IC951
SPS-420-1
REMOTE SIGNAL
DETECTOR
POWER
IND.
MUSIC JOG
(JS950)
KEY
MATRIX
S950~957
FL950
FL DISPLAY (ELU0001-194)
Q416
Q418
Q415
Q417
+38
−38
D401
~
D804
+5.6
+10
Q421,Q422
Q431,Q433
+12
Q411,Q413
−12
Q412,Q414
+B2
−B2
−BP
D421
~
D427
D435
~
D438
F101
F102
F001
−BP
D835, 436
Q435
Q436
F1
F2

■ Deck Section


TO JB221 OF
ENH-258-1
PB L/R
REC R/R
+12V
-12V
GND
+10V
+5.6V
D.RESET
P.CONT
DCS IN
DCS OUT
B-MECHA.
PB/REC HEAD
B-MECHA.
E.HEAD
PB Freq. Adj.
R323,324
BIAS Adj.
R355,356
BIAS OSC
L331
Q351,Q352
Q353
REC / PB
HEAD SW.
3,9
1,7
2,5,8
IC303
UPC1330HA
4
CONT
REC/PB Sens. Adj.
R205,206
PB AMP
IC302
PB Level Adj.
R333,334
REC OUT
EQIN
EQOUT
BIN
BIASOUT
10,47
11,46
13,44
3,54
40
DOLBY NR
&
REC AMP
IC304
HA12171NT
14
A/B
2,55
6,51
AEQ
8,49
14,15,18~22,24,31
21
REC MUTE
AIN
RIN
PBOUT
BEQ
AEQ
A/B
REC
NR
RMT
BIAS
MSI
C/M
DBU
PB AMP
IC301
PB Freq. Adj.
R303,304
PB Level Adj.
R311,312
A-MECHA.
PB HEAD
PBMT
PB MUTE
Q245~247
ALC / REC MUTE
IC353
Q303,Q304
Q345
REC R/R
Q221
Q220
Q223
Q222
Q208
DBU
A/B
NR
RMT
MSI
BEQ
PB.MUTE
FADE
HD614081SE39
DECK CONTROLLER
IC203
HALL IC
CAM SW
B MECH.
HALL IC
CAM SW
A MECH.
A CAM DRIVER IC207
A REEL DRIVER IC206
A MECH.
REEL SPEED CONTROL Q217,218
B CAM DRIVER IC205
B REEL DRIVER IC204
B MECH.
CPM
CAPSTAN CONTROL
Q213~Q216
VR201
M
M
M
M
M
KEY
MATRIX
S300~303
S310~313
S320~322
S330~333
AEQ
LEAF SW
APACK
ACrO2
METAL
FWD REC
REV REC
BPACK
BCrO2
A▼
A▲
B▲
B▼
REC
REV.
NR.B,C

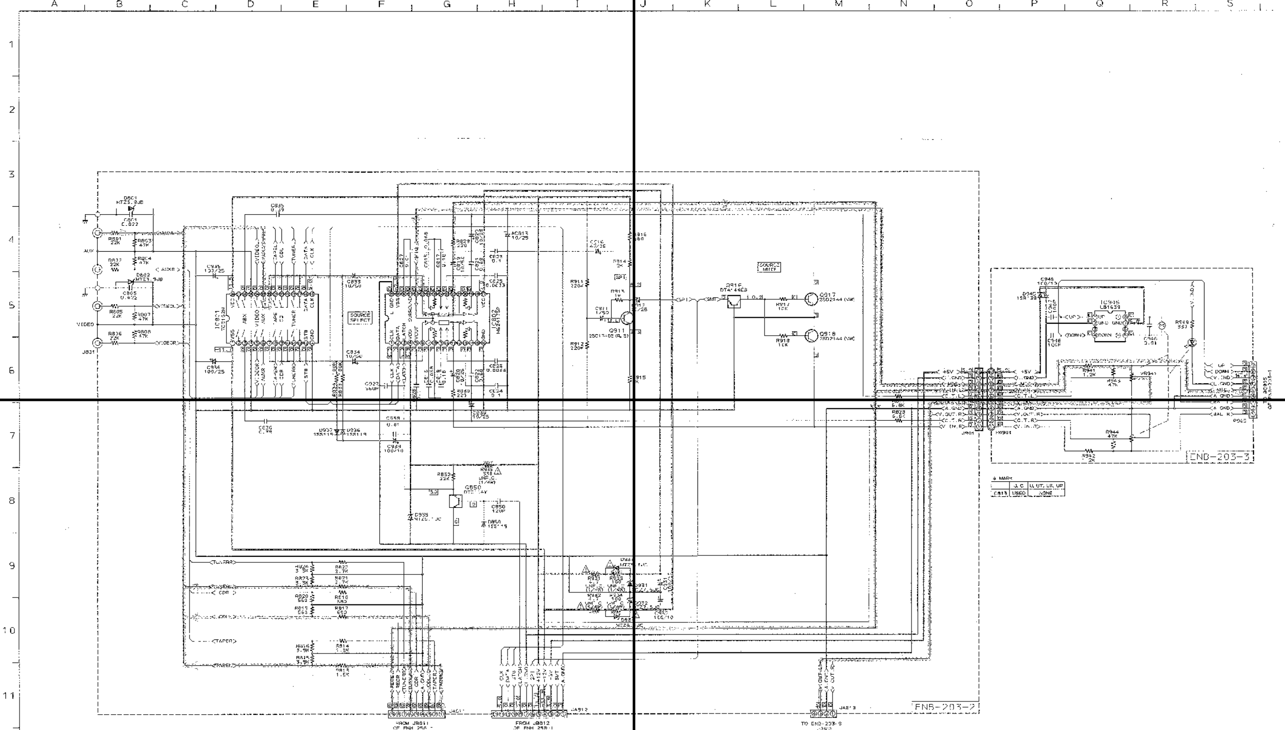
P2-19-b

P2-19-d

DX-C550

Schematic Diagrams

8 Input Selector & Volume Driver Section



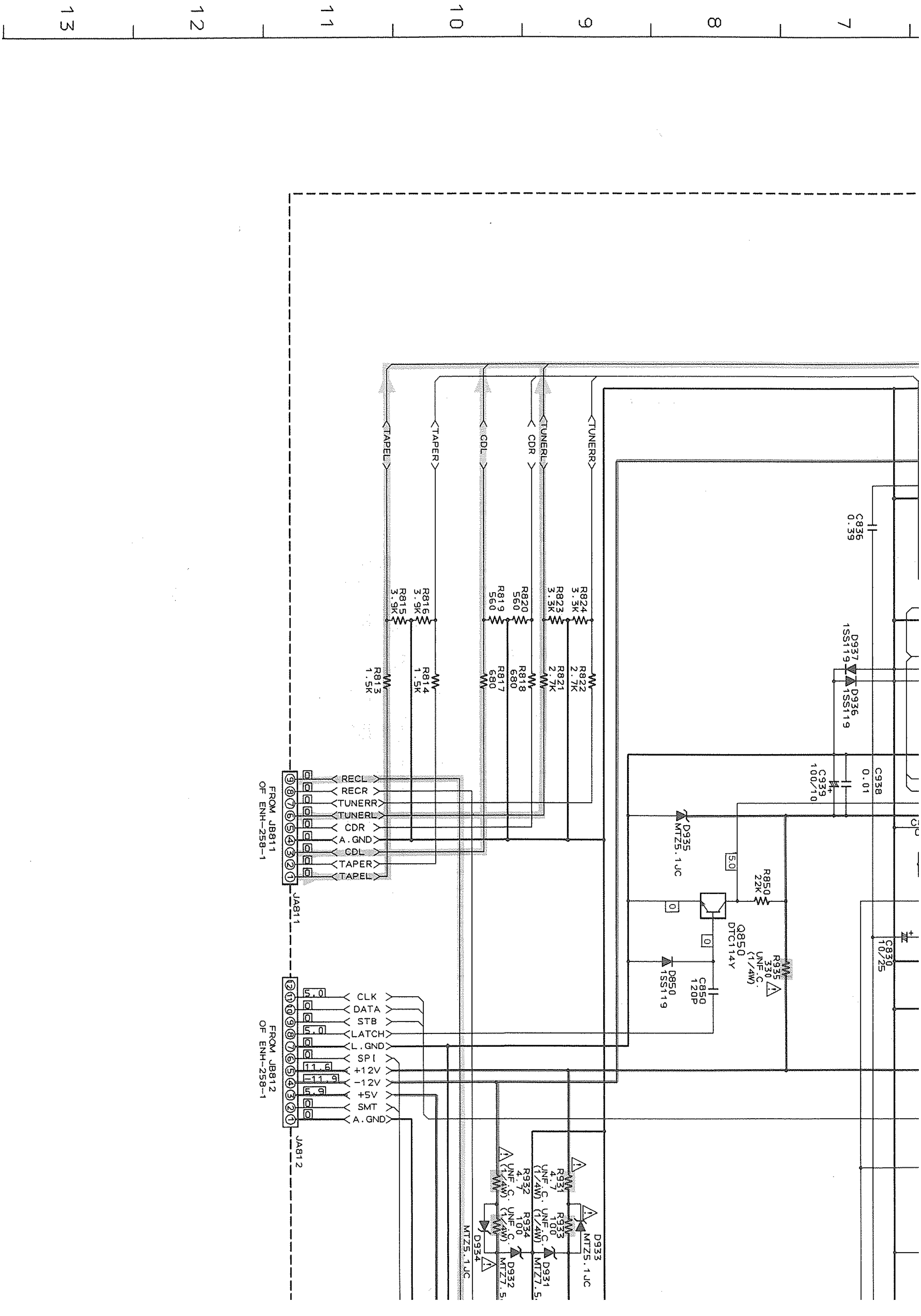
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
Q
R
S
1
2
3
4
5
6
7
8
9
10
11
12
13
AUX
VIDEO
J831
D801 MTZ3.9JB
C801 0.022
R801 22K
R803 47K
R802 22K
R804 47K
D802 MTZ3.9JB
C805 0.022
R805 22K
R807 47K
R806 22K
R808 47K
IC801 TC5152N
VSS
VDD
ABX
VIDEO
AUX
TAPE
CD
TUNER
STB
GND
DATA
CLK
C835 0.39
C836 0.39
C845 100/25
C856 100/25
C833 10/50
C834 10/50
SOURCE SELECT
IC802 M62417SP
CLK
DATA
LATCH
VDD
VOUT
GND
VSS
SURROUND
VCC
C827 0.1
C815 0.068
C817 0.18
C813 10/50
C821 0.68
C826 10/25
C823 0.1
C825 0.0033
C826 0.0066
C822 0.68
C824 0.1
C820 10/25
R829 220
R830 220
C827 56P
C858 0.01
C859 100/10
C830 10/25
D937 1SS119
D936 1SS119
R853 22K
R935 330
Q850 DTC144Y
D855 MTZ5.1JC
C850 120P
D850 1SS115
R911 220K
R912 220K
R913 1K
R914 2K
R915 1K
R916 560
C911 1/50
C916 47/25
Q911 2SC1740S (R, S)
SPT
SMT
SOUND MUTE
R917 10K
R918 10K
Q917 2SD2144 (VW)
Q918 2SD2144 (VW)
IC925 LB1633
R941 1.2K
R944 47K
R949 33K
END-203-3
FNB-203-2
FROM J8511 OF PWA 255-1
FROM J8512 OF PWA 255-1
TO END-203-9
JA813

Notes:

1. —— indicates +B power supply.
2. - - - indicates −B power supply.
3. ▨ indicates Main signal path.
4. ▨ indicates Recording signal path.
5. When replacing the parts in the shaded area (▨) and those marked with ⚠, be sure to use the designated parts to ensure safety.
6. This is the standard circuit diagram. The design and contents are subject to change without notice.

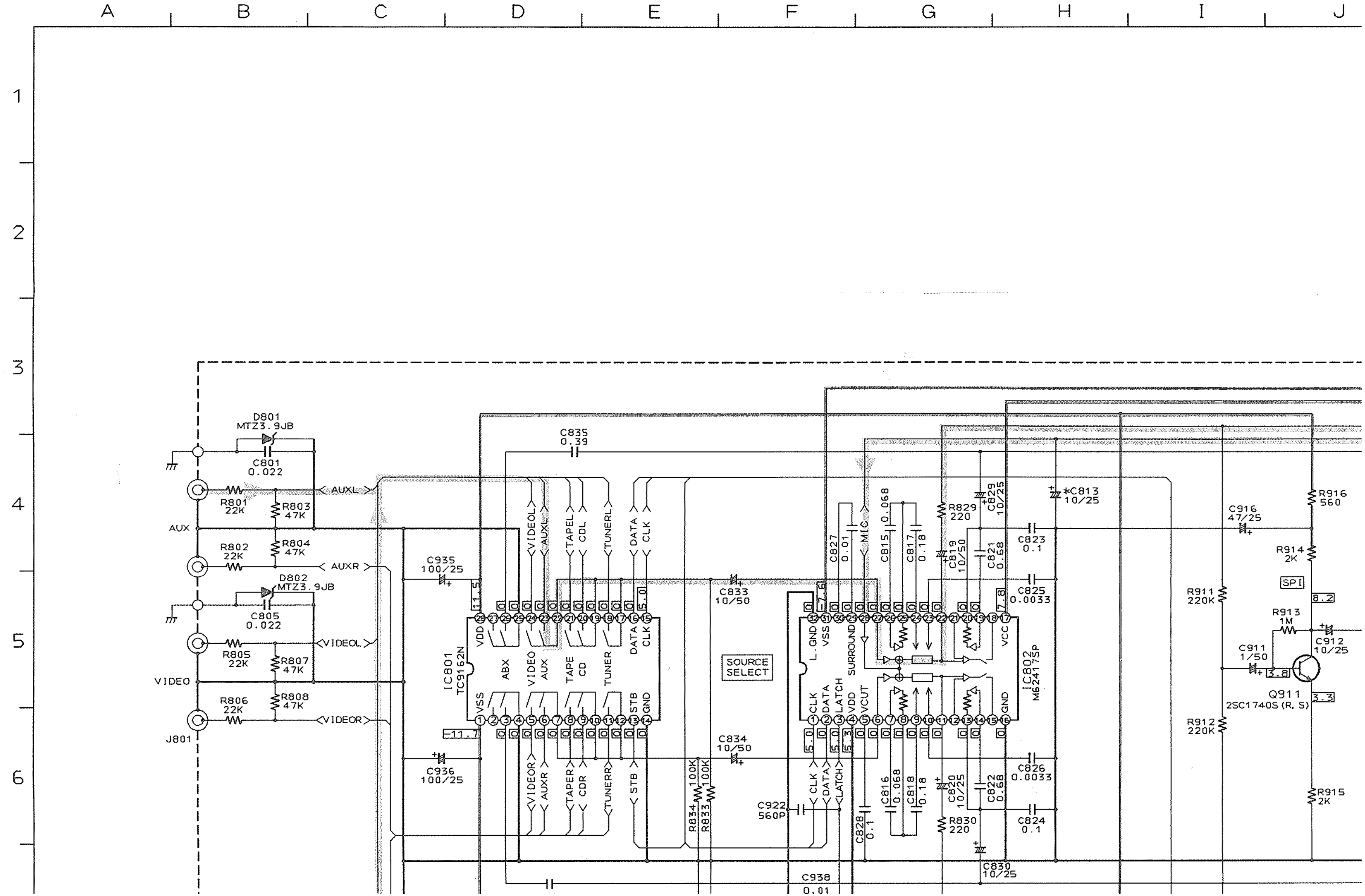
P2-19-a

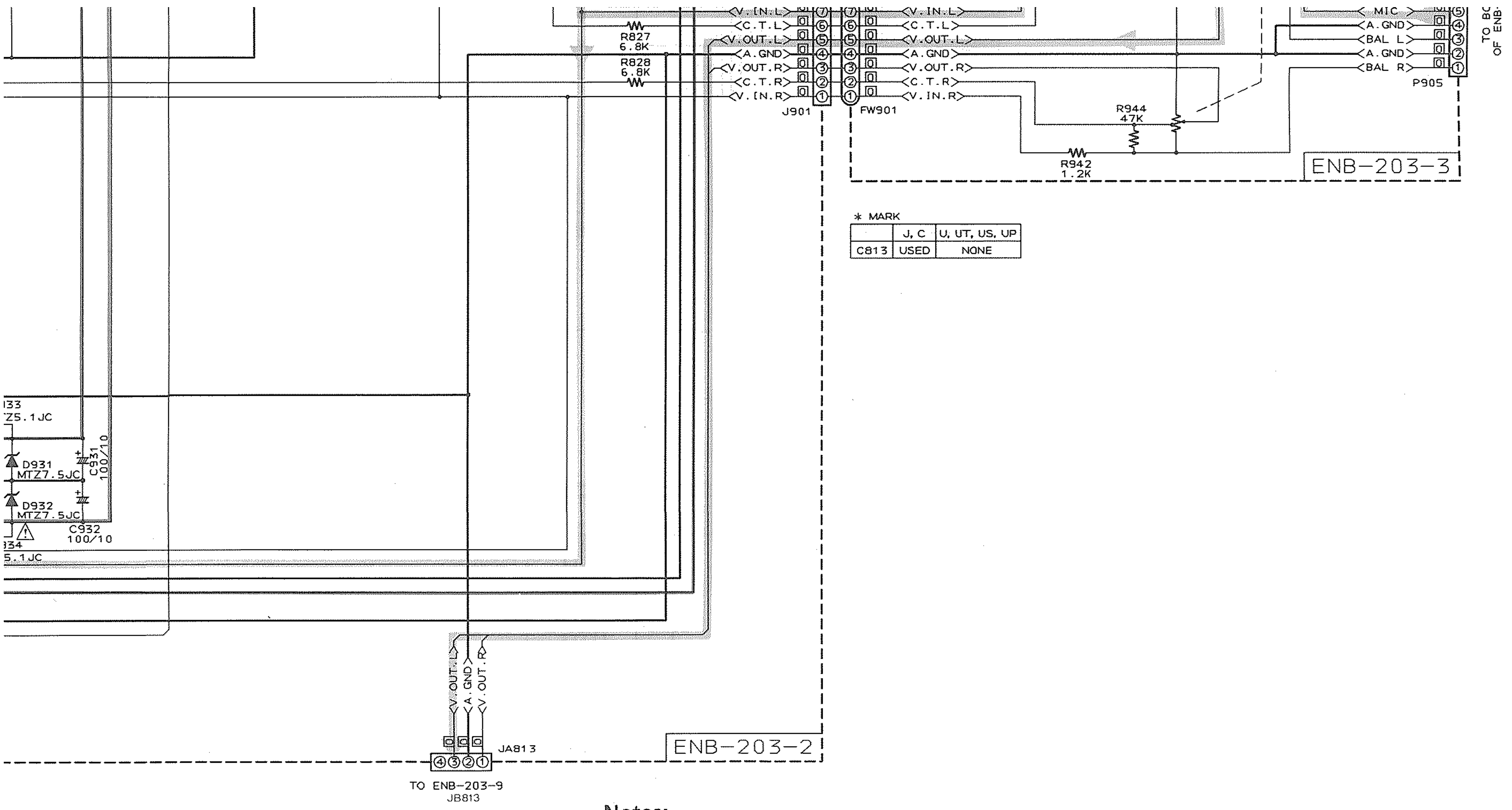
P2-19-c


13
12
11
10
9
8
7
TAPEL
TAPER
CDL
CDR
TUNERL
TUNERR
C836
0.39
R816
3.9K
R815
3.9K
R820
560
R819
560
R824
3.3K
R823
3.3K
R813
1.5K
R814
1.5K
R817
680
R818
680
R821
2.7K
R822
2.7K
D937
1SS119
D936
1SS119
C938
0.01
C939
100/10
D935
MTZ5.1JC
R850
22K
Q850
DTC114Y
R935
330
UNF.C.
(1/4W)
C850
120P
D850
1SS119
C830
10/25
RECL
RECR
TUNERR
TUNERL
CDR
A.GND
CDL
TAPER
TAPEL
FROM JB811
OF ENH-258-1
JA811
CLK
DATA
STB
LATCH
L.GND
SPI
+12V
-12V
+5V
SMT
A.GND
5.0
0
5.0
0
0
11.6
-11.9
5.9
0
0
FROM JB812
OF ENH-258-1
JA812
R931
4.7
UNF.C.
(1/4W)
R932
4.7
UNF.C.
(1/4W)
R933
100
UNF.C.
(1/4W)
R934
100
UNF.C.
(1/4W)
D933
MTZ5.1JC
D934
MTZ5.1JC
D931
MTZ7.5
D932
MTZ7.5

Schematic Diagrams

■ Input Selector & Volume Driver Section


A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
D801
MTZ3.9JB
C801
0.022
AUXL
R801
22K
R803
47K
AUX
R802
22K
R804
47K
AUXR
D802
MTZ3.9JB
C805
0.022
VIDEOL
R805
22K
R807
47K
VIDEO
R806
22K
R808
47K
VIDEOR
J801
C835
0.39
C935
100/25
C936
100/25
IC801
TC9162N
VDD
VSS
ABX
VIDEO
AUX
TAPE
CD
TUNER
DATA
CLK
STB
GND
TAPEL
CDL
TUNERL
TAPER
CDR
TUNERR
11.5
-11.7
5.0
C833
10/50
C834
10/50
SOURCE SELECT
R834 100K
R833 100K
C922
560P
C938
0.01
IC802
M62417SP
L.GND
VSS
SURROUND
VCC
LATCH
VCUT
MIC
-7.6
7.8
5.3
C827
0.01
C815
0.068
C817
0.18
C816
0.068
C818
0.18
C828
0.1
C819
10/50
C820
10/25
C821
0.68
C822
0.68
R829
220
R830
220
C829
10/25
C830
10/25
C823
0.1
C824
0.1
C825
0.0033
C826
0.0033
*C813
10/25
C916
47/25
R916
560
R914
2K
SPI
8.2
R911
220K
R912
220K
R913
1M
C911
1/50
C912
10/25
3.8
3.3
Q911
2SC1740S (R, S)
R915
2K



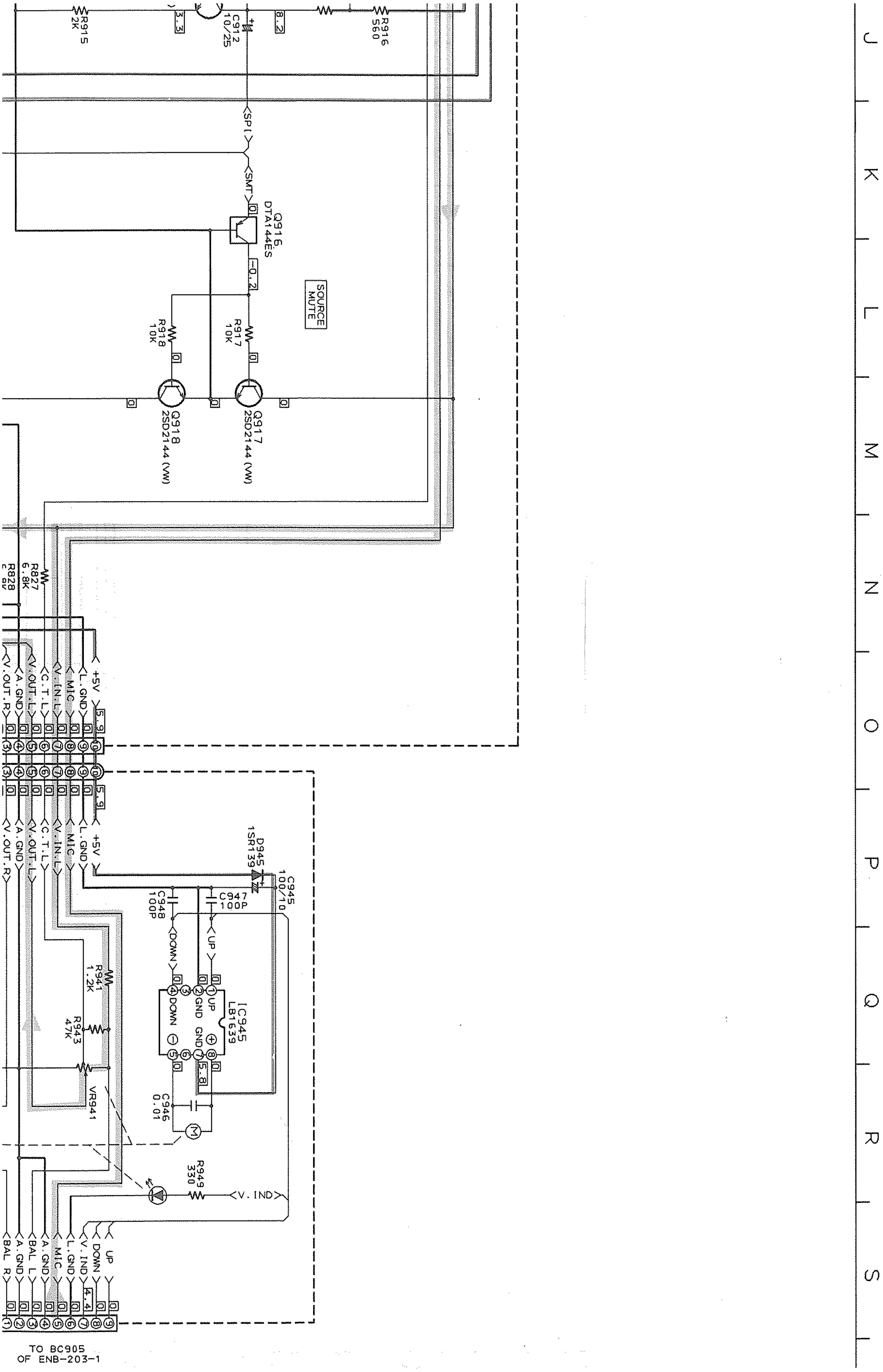
133
Z5.1JC
D931
MTZ7.5JC
C931
100/10
D932
MTZ7.5JC
C932
100/10
134
5.1JC
R827
6.8K
R828
6.8K
<V.IN.L>
<C.T.L>
<V.OUT.L>
<A.GND>
<V.OUT.R>
<C.T.R>
<V.IN.R>
J901
FW901
R944
47K
R942
1.2K
ENB-203-3
<MIC>
<A.GND>
<BAL L>
<A.GND>
<BAL R>
P905
TO BO
OF ENB-
<V.OUT.L>
<A.GND>
<V.OUT.R>
JA813
ENB-203-2
TO ENB-203-9
JB813

* MARK

	J, C	U, UT, US, UP
C813	USED	NONE

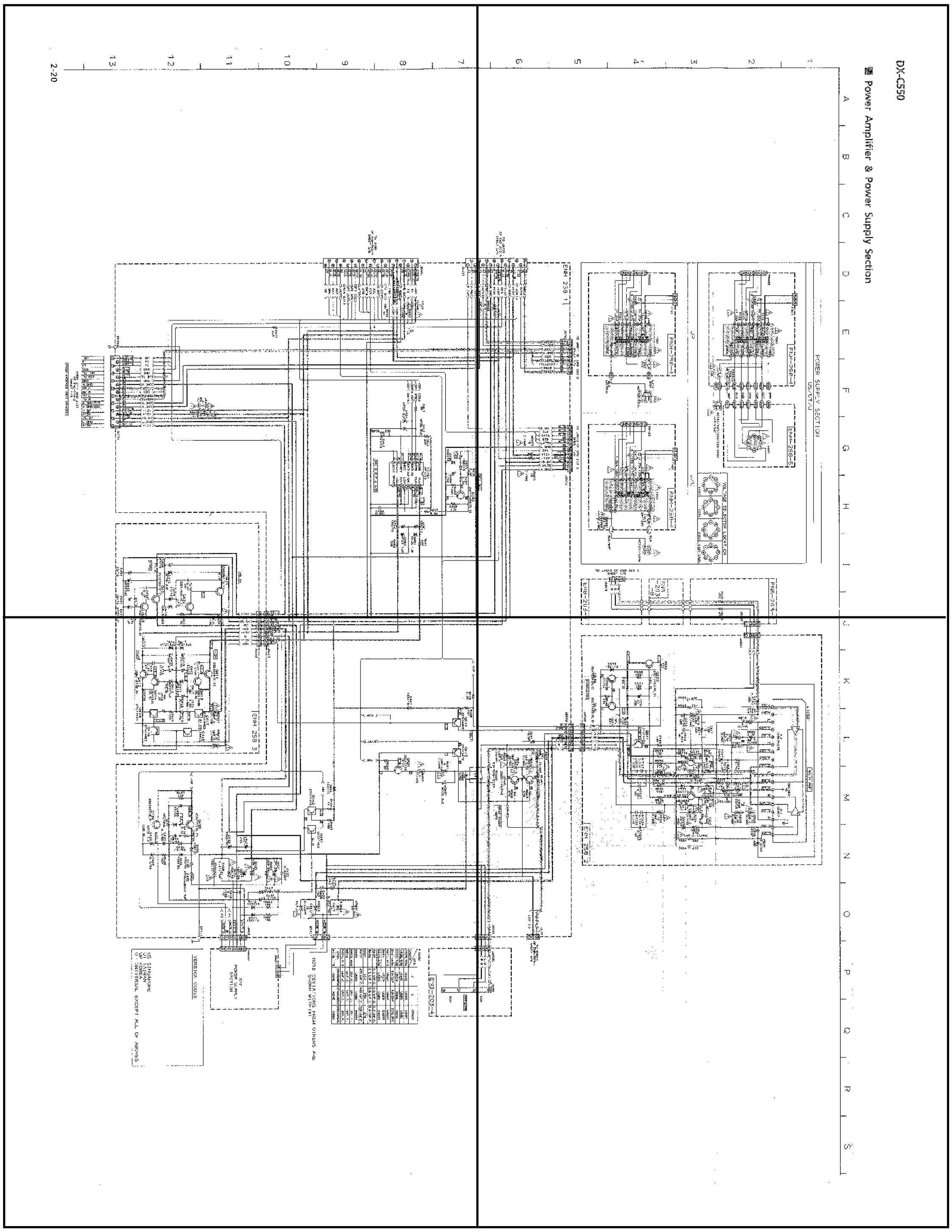
Notes:

1.— indicates +B power supply.
2.— indicates −B power supply.
3.▨ indicates Main signal path.
4.▨ indicates Recording signal path.
5. When replacing the parts in the shaded area (▨) and those marked with ⚠, be sure to use the designated parts to ensure safety.
6. This is the standard circuit diagram. The design and contents are subject to change without notice.

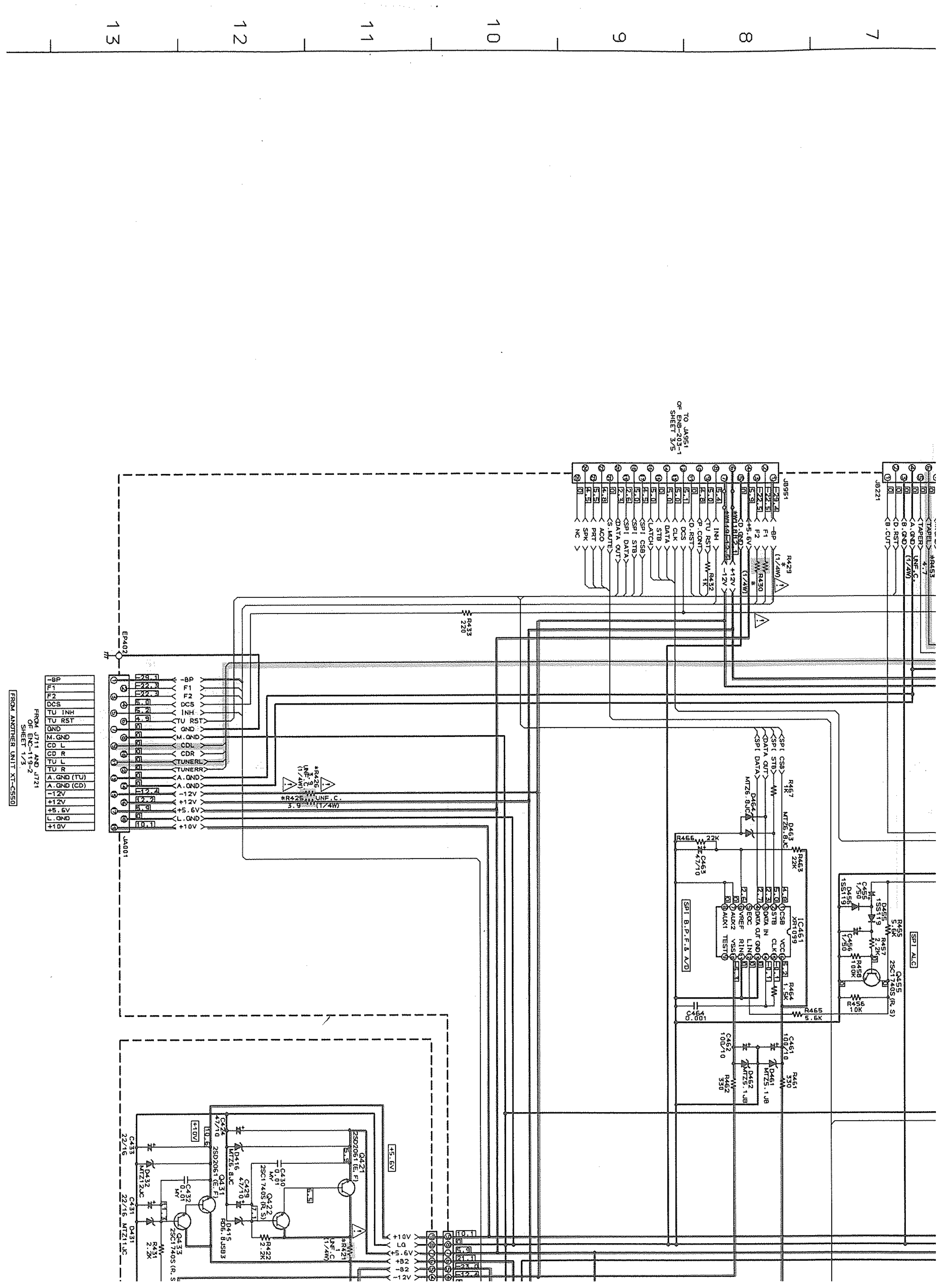

R915 2K
3.3
C912 10/25
8.2
R916 560
SPI
SMT
Q916 DTA144ES
-0.2
SOURCE MUTE
R918 10K
R917 10K
Q918 2SD2144 (VW)
Q917 2SD2144 (VW)
R827 6.8K
R828
+5V
L.GND
MIC
V.IN.L
C.T.L
V.OUT.L
A.GND
V.OUT.R
5.9
D945 1SR139
C945 100/10
C947 100P
C948 100P
DOWN
UP
IC945 LB1639
UP
GND
DOWN
GND
R941 1.2K
R943 47K
VR941
C946 0.01
5.8
M
R949 330
V.IND
UP
DOWN
V.IND
L.GND
MIC
A.GND
BAL L
A.GND
BAL R
4.4
TO BC905 OF ENB-203-1
J
K
L
M
N
O
P
Q
R
S

DX-C550

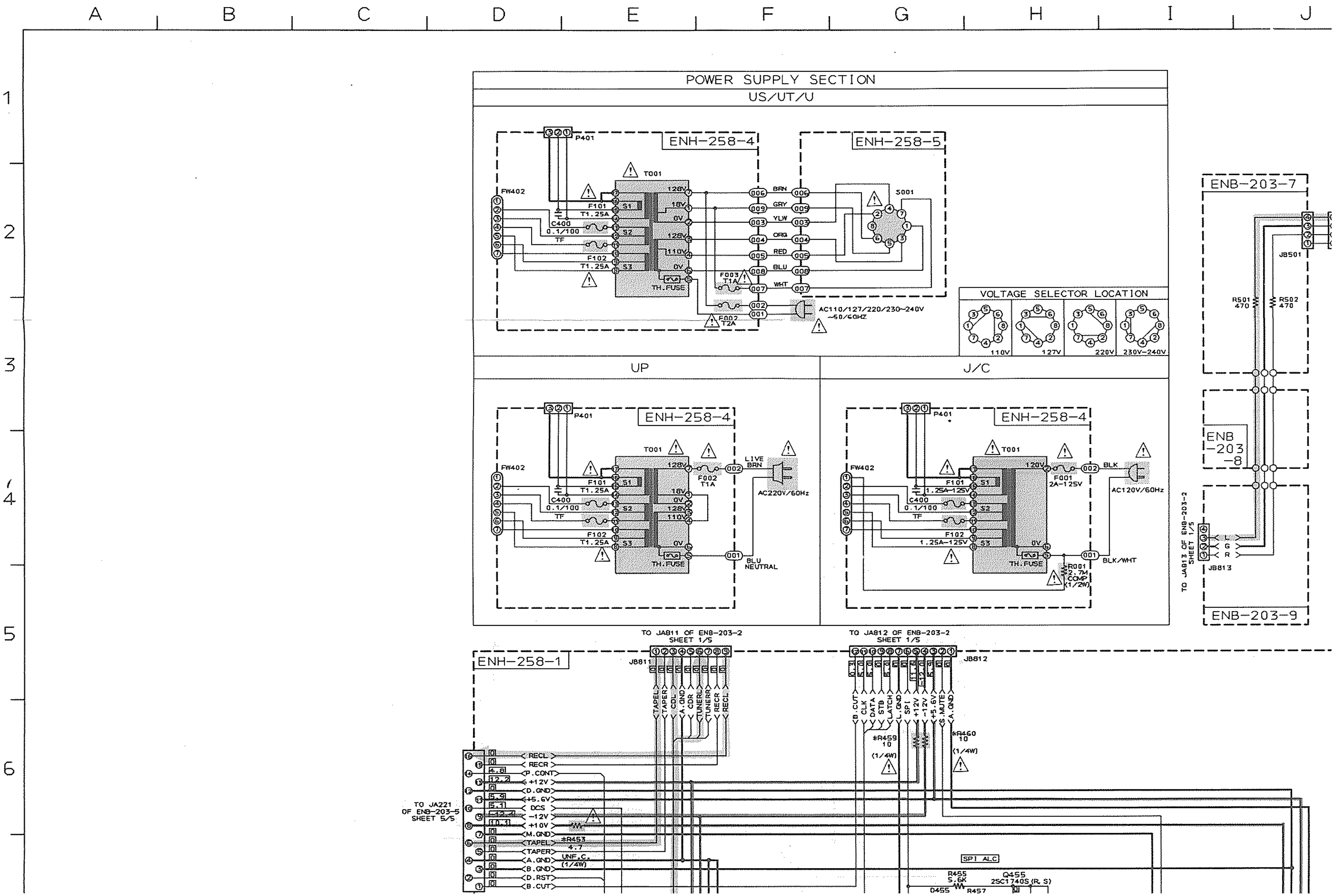
P2-20-a P2-20-b

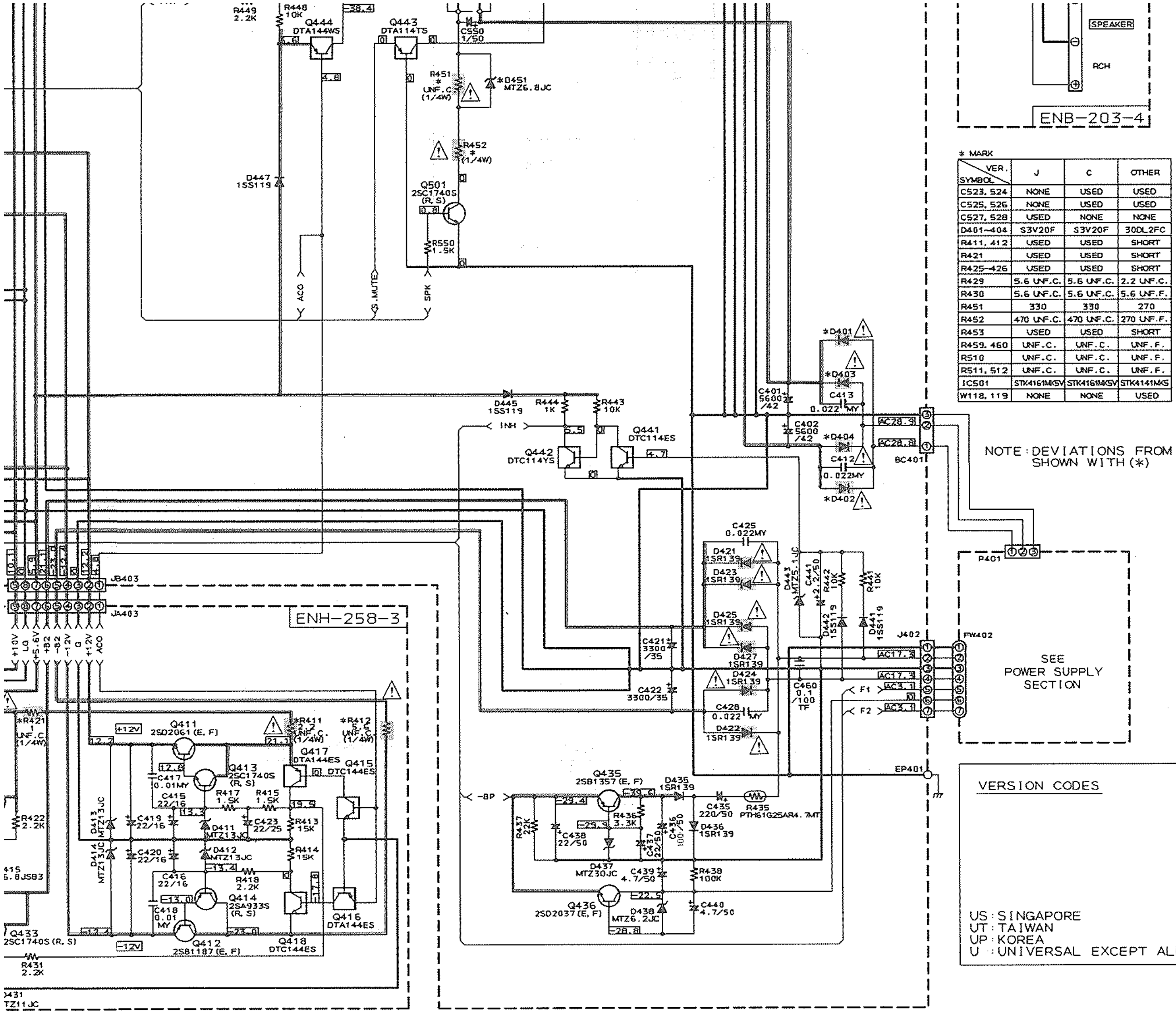

DX-C550
Power Amplifier & Power Supply Section
POWER SUPPLY SECTION
2-20
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
Q
R
S
1
2
3
4
5
6
7
8
9
10
11
12
13

P2-20-c P2-20-d


13
12
11
10
9
8
7
TO JA951 OF ENB-203-1 SHEET 3/5
JB951
JB221
EP402
JA001
FROM J711 AND J721 OF ENC-119-2 SHEET 1/3
FROM ANOTHER UNIT XT-C550
-BP
F1
F2
DCS
TU INH
TU RST
GND
M.GND
CD L
CD R
TU L
TU R
A.GND (TU)
A.GND (CD)
-12V
+12V
+5.6V
L.GND
+10V
R433 220
R429
R430
R432 1K
*R425 3.9 UNF.C. (1/4W)
*R426 UNF.C. (1/4W)
IC461 XR1099
SPI B.P.F.& A/D
SPI ALC
Q455 2SC1740S(R,S)
R467 1K
D463 MTZ6.8JC
D464 MTZ6.8JC
R466 22K
C463 47/10
R463 22K
R464 1.5K
R465 5.6K
C464 0.001
C461 100/10
C462 100/10
D461 MTZ5.1JB
D462 MTZ5.1JB
R461 330
R462 330
R455 5.6K
D455 1SS119
D456 1SS119
C455 1/50
C456 1/50
R457 2.2K
R458 100K
R456 10K
Q421 2SD2061(E,F)
Q422 2SC1740S(R,S)
Q431 2SD2061(E,F)
Q433 2SC1740S(R,S)
C424 47/10
C429 47/10
C430 0.01 MY
C432 0.01 MY
C433 22/16
C431 22/16
D416 MTZ6.8JC
D415 RD6.8JSB3
D432 MTZ12JC
D431 MTZ11JC
R422 2.2K
R431 2.2K
*R421 1 UNF.C. (1/4W)
+10V
+5.6V
LG
+B2
-B2
-12V

Power Amplifier & Power Supply Section


POWER SUPPLY SECTION
US/UT/U
UP
J/C
ENH-258-4
ENH-258-5
ENH-258-1
ENB-203-7
ENB-203-8
ENB-203-9
VOLTAGE SELECTOR LOCATION
110V
127V
220V
230V-240V
P401
FW402
T001
S001
F101 T1.25A
F102 T1.25A
F002 T2A
F003 T1A
F002 T1A
F101 1.25A-125V
F102 1.25A-125V
F001 2A-125V
C400 0.1/100
TF
TH.FUSE
128V
18V
0V
125V
110V
120V
S1
S2
S3
BRN
GRY
YLW
ORG
RED
BLU
WHT
AC110/127/220/230-240V ~50/60HZ
LIVE BRN
BLU NEUTRAL
AC220V/60Hz
BLK
BLK/WHT
AC120V/60Hz
R001 2.7M COMP (1/2W)
R501 470
R502 470
JB501
JB813
TO JA813 OF ENB-203-2 SHEET 1/5
TO JA811 OF ENB-203-2 SHEET 1/5
TO JA812 OF ENB-203-2 SHEET 1/5
TO JA221 OF ENB-203-5 SHEET 5/5
JB811
JB812
TAPEL
TAPER
CDL
A.GND
CDR
TUNERL
TUNERR
RECR
RECL
B.CUT
CLK
DATA
STB
LATCH
L.GND
SPI
+12V
-12V
+5.6V
S.MUTE
A.GND
P.CONT
D.GND
DCS
+10V
M.GND
B.GND
D.RST
*R453 4.7 UNF.C. (1/4W)
*R459 10 (1/4W)
*R460 10 (1/4W)
SPI ALC
R455 5.6K
R457
D455
Q455 2SC1740S(R,S)
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6


ENB-203-4
SPEAKER
RCH
R449 2.2K
R448 10K
Q444 DTA144WS
Q443 DTA114TS
C550 1/50
R451 * UNF.C (1/4W)
*D451 MTZ6.8JC
R452 * (1/4W)
Q501 2SC1740S (R, S)
R550 1.5K
D447 1SS119
ACO
S.MUTE
SPK
D445 1SS119
R444 1K
R443 10K
INH
Q442 DTC114YS
Q441 DTC114ES
*D401
*D403
C401 5600 /42
C413 0.022 MY
C402 5600 /42
*D404
C412 0.022MY
*D402
BC401
AC28.9
AC28.8
P401
C425 0.022MY
D421 1SR139
D423 1SR139
D425 1SR139
D427 1SR139
D424 1SR139
D422 1SR139
C428 0.022 MY
D443 MTZ5.1JC
C441 +2.2/50
R442 10K
R441 10K
D442 1SS119
D441 1SS119
C421 3300 /35
C422 3300/35
C460 0.1 /100 TF
J402
FW402
AC17.3
AC17.3
AC3.1
AC3.1
F1
F2
SEE POWER SUPPLY SECTION
EP401
J8403
JA403
+10V
LG
+5.6V
+B2
-B2
-12V
G
+12V
ACO
ENH-258-3
*R421 1 UNF.C (1/4W)
R422 2.2K
Q411 2SD2061 (E, F)
*R411 2.2 UNF.C (1/4W)
*R412 5.6 UNF.C (1/4W)
Q417 DTA144ES
Q415 DTC144ES
Q413 2SC1740S (R, S)
C417 0.01MY
C415 22/16
R417 1.5K
R415 1.5K
C419 22/16
D411 MTZ13JC
C423 22/25
R413 15K
D413 MTZ13JC
D414 MTZ13JC
C420 22/16
D412 MTZ13JC
R414 15K
C416 22/16
R418 2.2K
Q414 2SA933S (R, S)
C418 0.01 MY
Q412 2SB1187 (E, F)
Q418 DTC144ES
Q416 DTA144ES
Q433 2SC1740S (R, S)
R431 2.2K
D431 MTZ11JC
-BP
Q435 2SB1357 (E, F)
D435 1SR139
C435 220/50
R435 PTH61G25AR4.7MT
R437 22K
R436 3.3K
C438 22/50
C437 22/50
C436 100/50
D436 1SR139
D437 MTZ30JC
C439 4.7/50
R438 100K
Q436 2SD2037 (E, F)
D438 MTZ6.2JC
C440 4.7/50
+12V
-12V
12.2
21.1
12.8
13.2
13.4
13.0
12.4
23.0
17.8
19.5
29.4
29.3
30.6
22.5
28.8
4.8
4.7
5.5
38.4
5.6
0.8

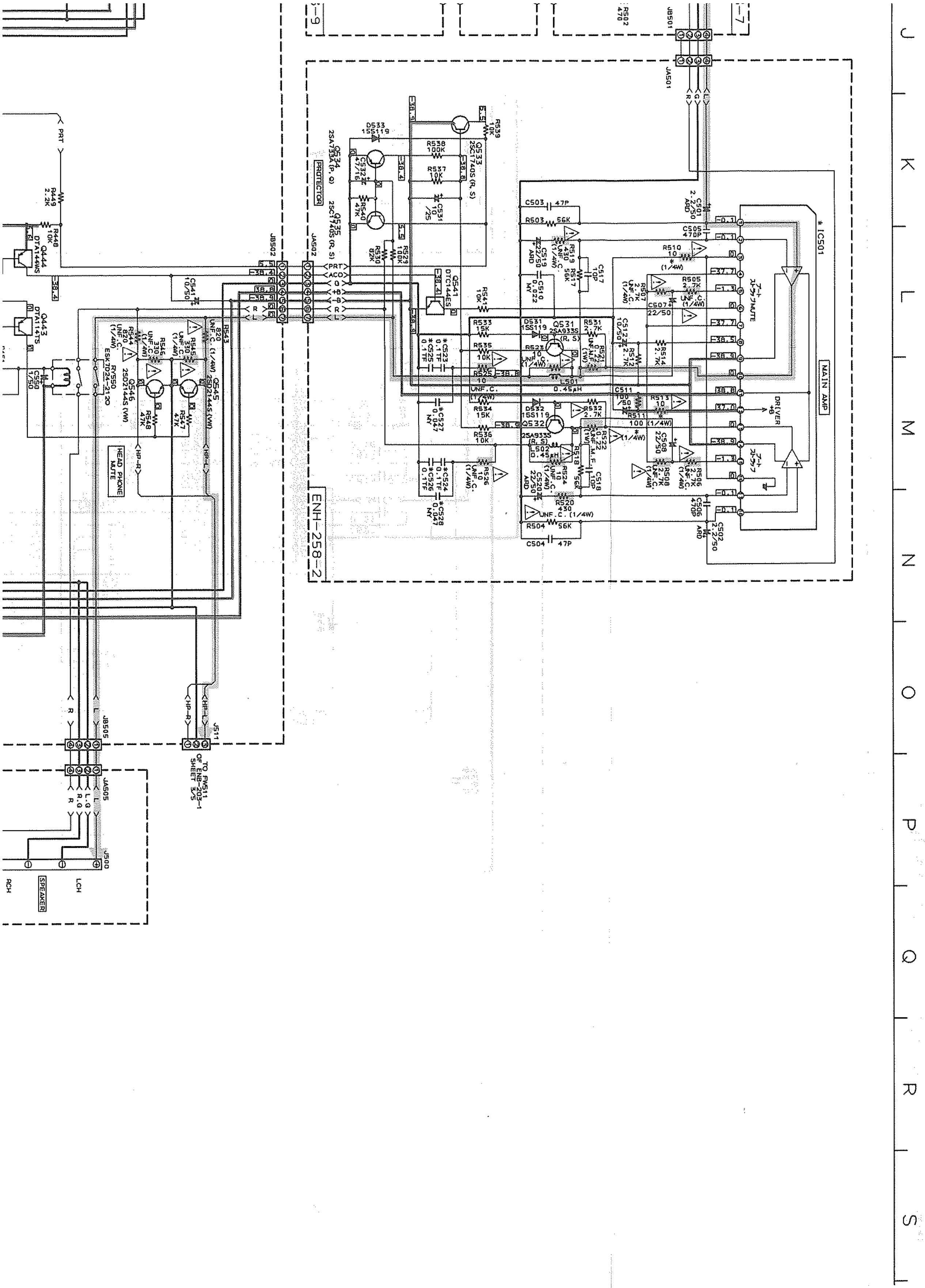
* MARK

VER. SYMBOL	J	C	OTHER
C523, 524	NONE	USED	USED
C525, 526	NONE	USED	USED
C527, 528	USED	NONE	NONE
D401~404	S3V20F	S3V20F	30DL2FC
R411, 412	USED	USED	SHORT
R421	USED	USED	SHORT
R425~426	USED	USED	SHORT
R429	5.6 UNF.C.	5.6 UNF.C.	2.2 UNF.C.
R430	5.6 UNF.C.	5.6 UNF.C.	5.6 UNF.F.
R451	330	330	270
R452	470 UNF.C.	470 UNF.C.	270 UNF.F.
R453	USED	USED	SHORT
R459, 460	UNF.C.	UNF.C.	UNF.F.
R510	UNF.C.	UNF.C.	UNF.F.
R511, 512	UNF.C.	UNF.C.	UNF.F.
IC501	STK4161MKSV	STK4161MKSV	STK4141MKS
W118, 119	NONE	NONE	USED

NOTE: DEVIATIONS FROM OTHERS ARE
SHOWN WITH (*)

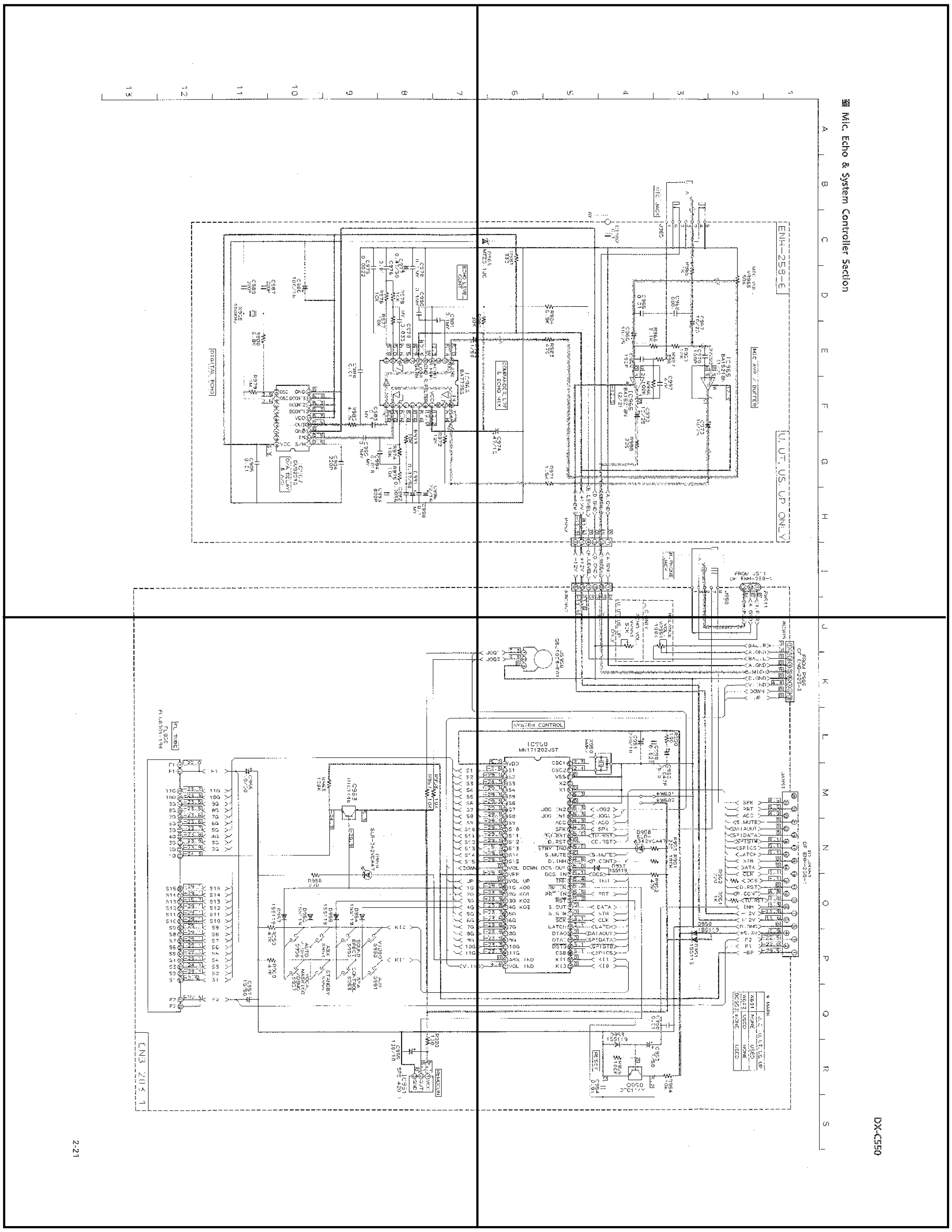
VERSION CODES

US : SINGAPORE
UT : TAIWAN
UP : KOREA
U : UNIVERSAL EXCEPT ALL OF ABOVES


ENH-258-2
MAIN AMP
* IC501
PROTECTOR
HEAD PHONE MUTE
SPEAKER
LCH
RCH
JB501
JA501
JB502
JA502
JB505
JA505
J500
J511
TO FW511 OF ENB-203-1 SHEET 3/5
Q531 2SA933S (R, S)
Q532 2SA933S (R, S)
Q533 2SC1740S (R, S)
Q534 2SA733A (P, Q)
Q535 2SC1740S (R, S)
Q541 DTC144ES
Q545 2SD2144S (VW)
Q546 2SD2144S (VW)
Q443 DTA114TS
Q444 DTA144WS
RY550 ESK7D24-2120
D531 1SS119
D532 1SS119
D533 1SS119
L501 0.45μH
L502 0.45μH
PRT
ACO
HP-R
HP-L
DRIVER
J
K
L
M
N
O
P
Q
R
S

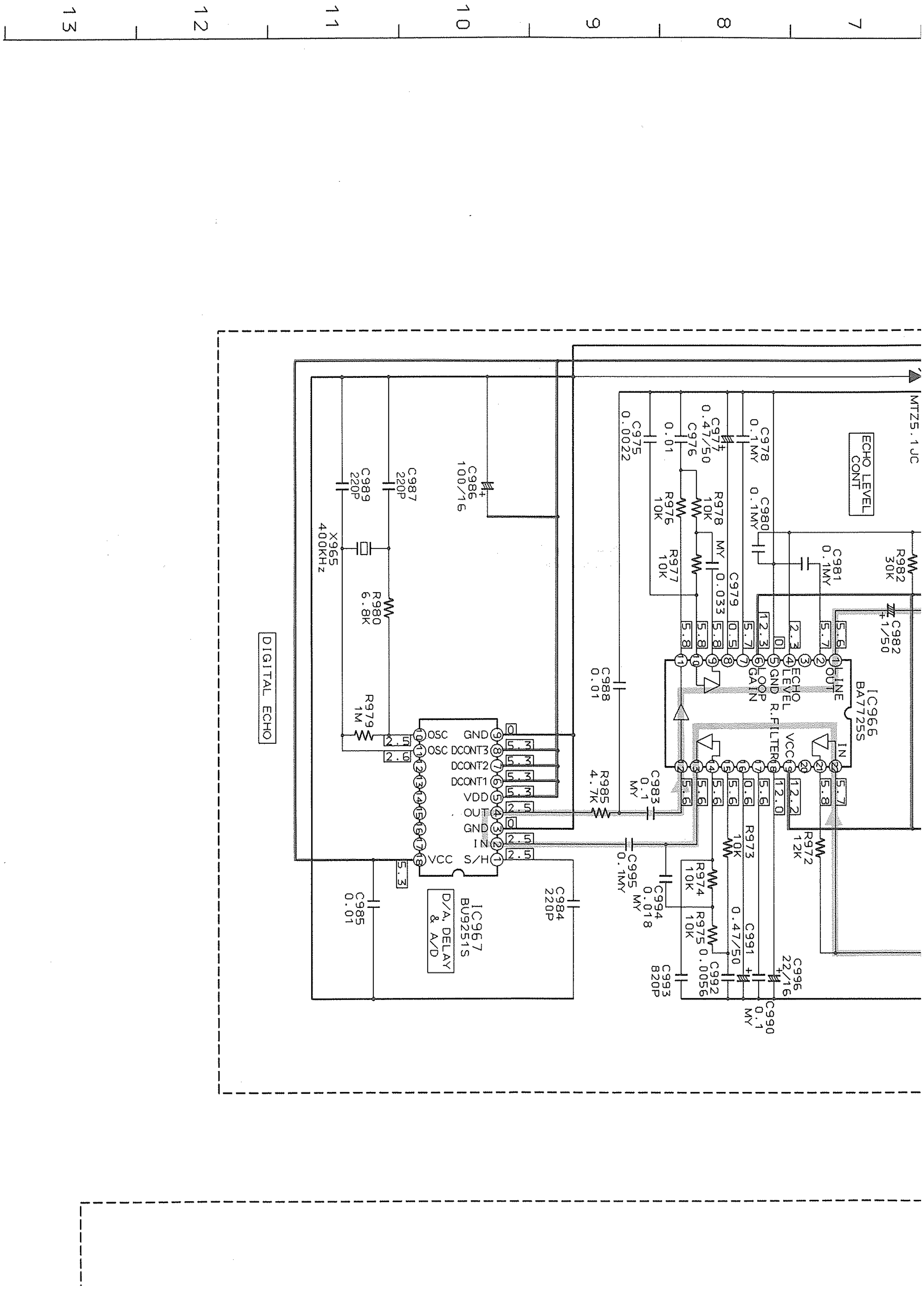
P2-21-a

P2-21-b

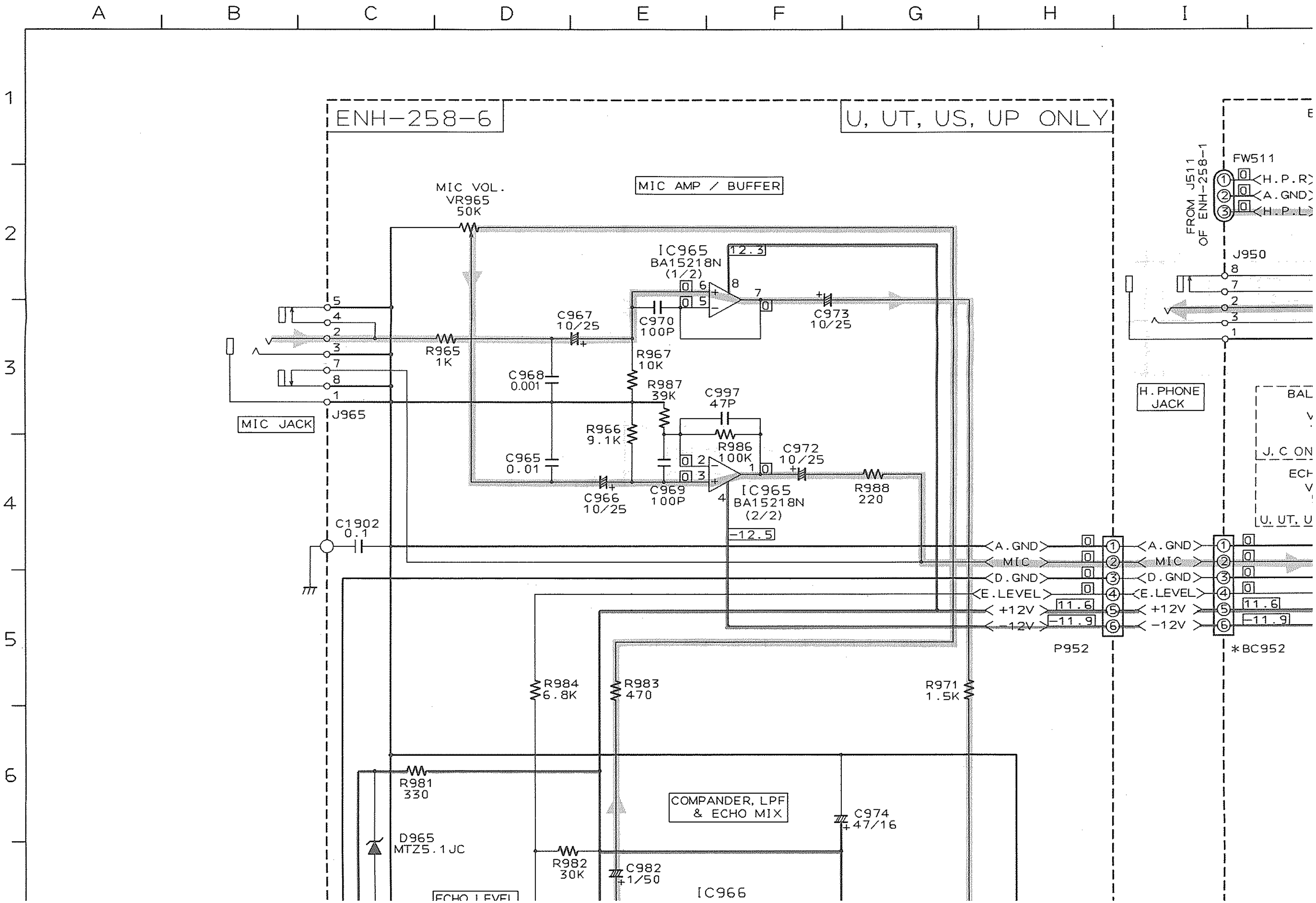

■ Mic. Echo & System Controller Section
ENH-258-E
U, UT, US, UP ONLY
MIC AMP / BUFFER
DIGITAL ECHO
COMPANDER, L.P.F & ECHO MIX
SYSTEM CONTROL
IC950
MN171202JST
DX-C550
2-21

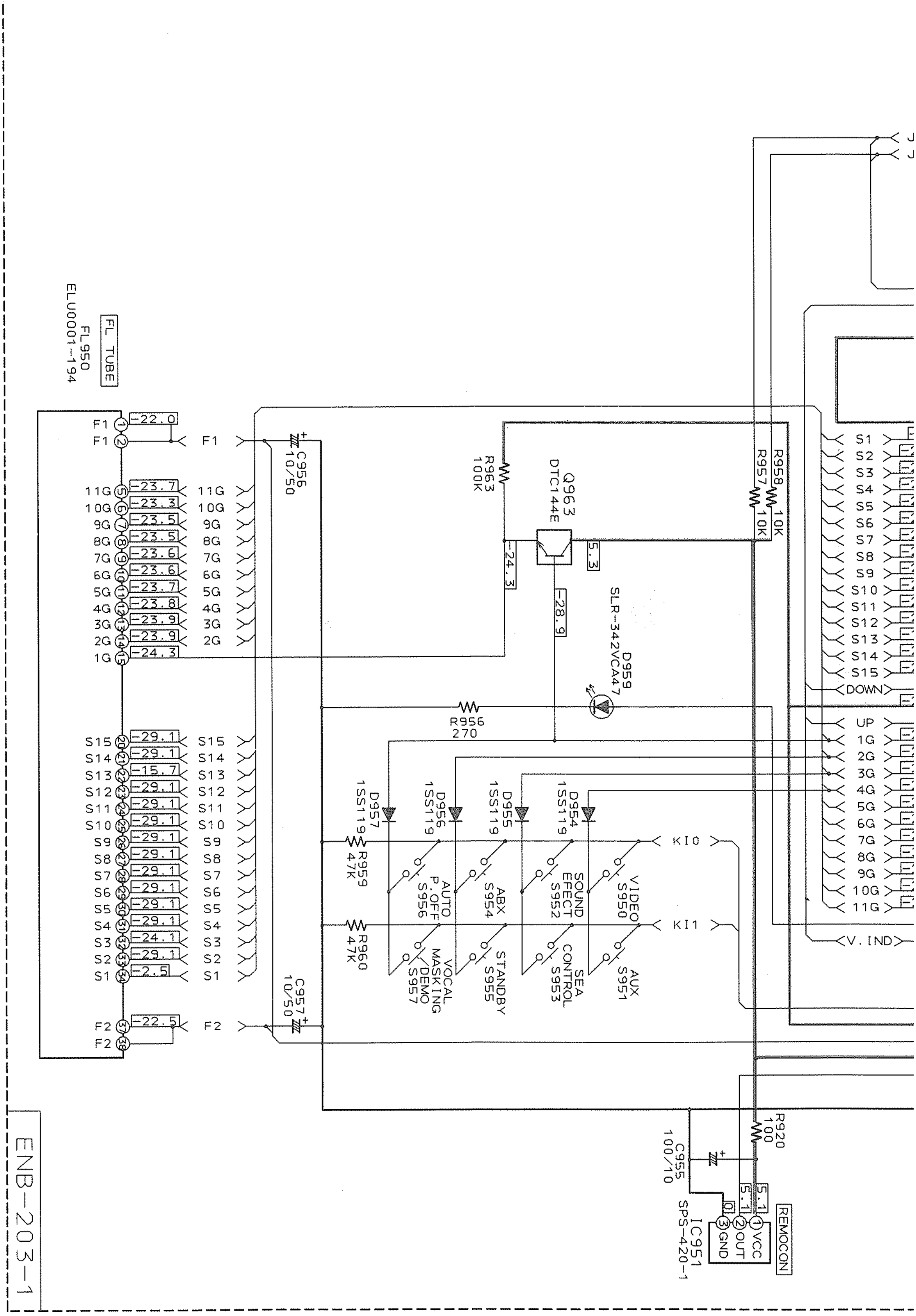
P2-21-c

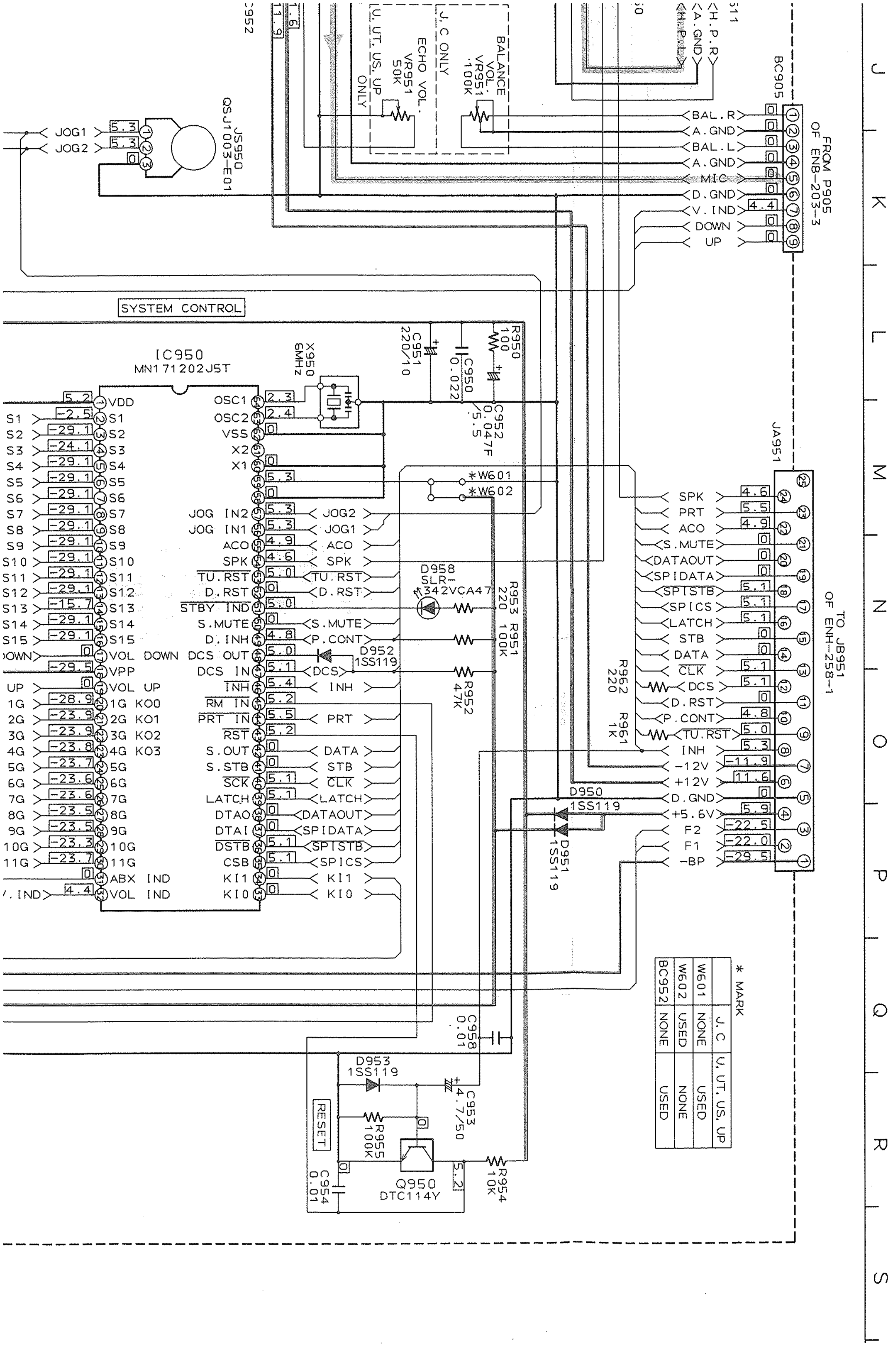
P2-21-d


13
12
11
10
9
8
7
DIGITAL ECHO
ECHO LEVEL CONT
MTZ5.1JC
IC966
BA7725S
IC967
BU9251S
D/A, DELAY & A/D
X965 400KHz
C975 0.0022
C976 0.01
C977 0.47/50
C978 0.1MY
C979 0.033
C980 0.1MY
C981 0.1MY
C982 1/50
C983 0.1 MY
C984 220P
C985 0.01
C986 100/16
C987 220P
C988 0.01
C989 220P
C990 0.1 MY
C991 0.47/50
C992 0.0056
C993 820P
C994 0.018 MY
C995 0.1MY
C996 22/16
R972 12K
R973 10K
R974 10K
R975 10K
R976 10K
R977 10K
R978 10K
R979 1M
R980 6.8K
R982 30K
R985 4.7K
OSC
OSC
GND
DCONT3
DCONT2
DCONT1
VDD
OUT
GND
IN
S/H
VCC
L.LINE OUT
ECHO LEVEL
GND
LOOP GAIN
R.FILTER
VCC
IN
5.8
5.8
5.8
0.5
5.7
12.3
0
2.3
5.7
5.6
5.6
5.6
5.6
0.6
5.6
12.0
12.2
5.8
5.7
0
5.3
5.3
5.3
5.3
2.5
0
2.5
2.5
2.5
2.6
5.3

Mic. Echo & System Controller Section


A
B
C
D
E
F
G
H
I
1
2
3
4
5
6
ENH-258-6
U, UT, US, UP ONLY
MIC VOL.
VR965
50K
MIC AMP / BUFFER
IC965
BA15218N
(1/2)
12.3
C967
10/25
C970
100P
C973
10/25
R965
1K
R967
10K
C968
0.001
R987
39K
C997
47P
R966
9.1K
R986
100K
C972
10/25
C965
0.01
C966
10/25
C969
100P
IC965
BA15218N
(2/2)
R988
220
-12.5
MIC JACK
J965
C1902
0.1
A.GND
MIC
D.GND
E.LEVEL
+12V
-12V
11.6
-11.9
P952
*BC952
R984
6.8K
R983
470
R971
1.5K
R981
330
COMPANDER, LPF
& ECHO MIX
C974
47/16
D965
MTZ5.1JC
R982
30K
C982
1/50
IC966
ECHO LEVEL
FROM J511
OF ENH-258-1
FW511
H.P.R
A.GND
H.P.L
J950
H.PHONE
JACK
BAL
J.C ON
ECH
U, UT, U

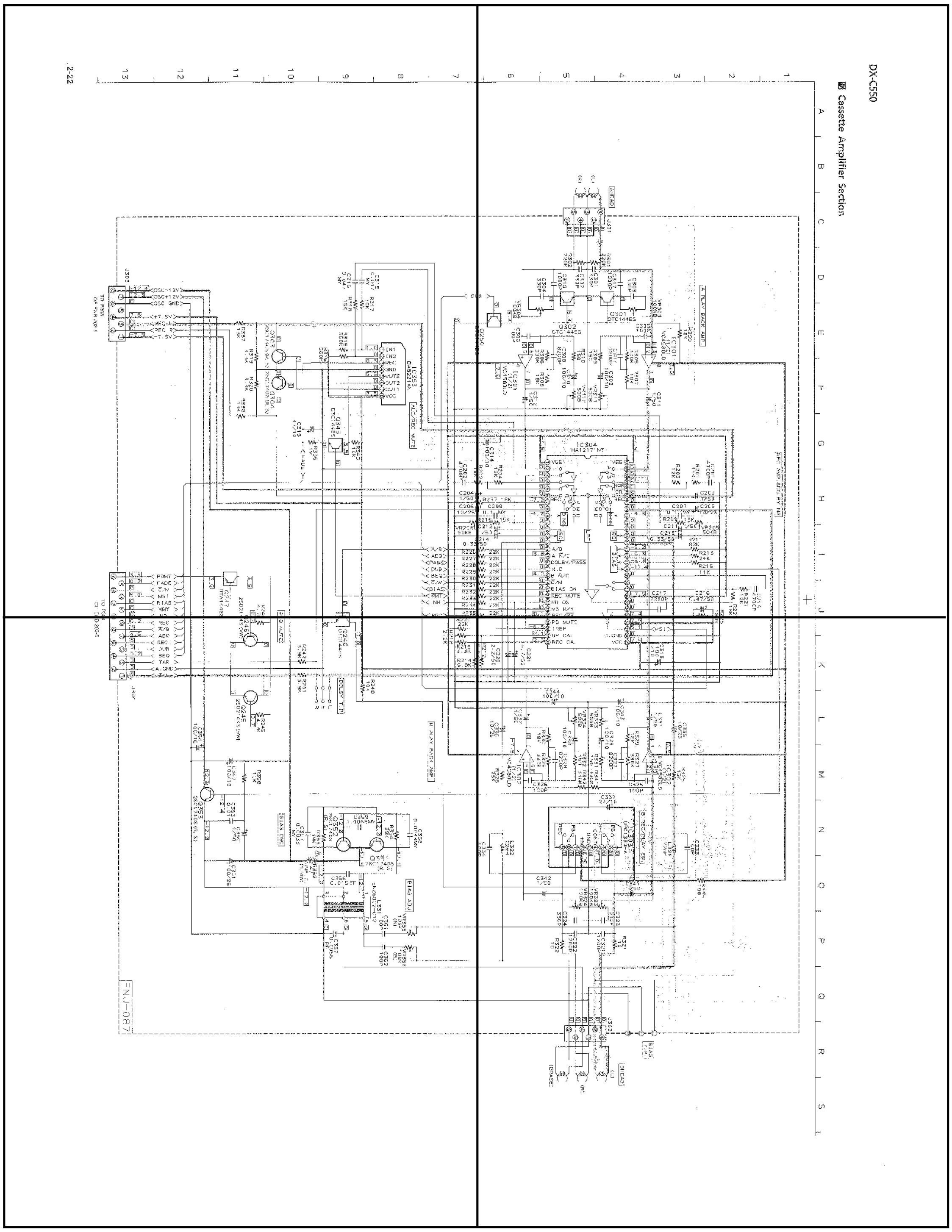

FL TUBE
FL950
ELU0001-194
ENB-203-1
F1 F1 F2 F2
11G 10G 9G 8G 7G 6G 5G 4G 3G 2G 1G
S15 S14 S13 S12 S11 S10 S9 S8 S7 S6 S5 S4 S3 S2 S1
-22.0
-23.7
-23.3
-23.5
-23.5
-23.6
-23.6
-23.7
-23.8
-23.9
-23.9
-24.3
-29.1
-29.1
-15.7
-29.1
-29.1
-29.1
-29.1
-29.1
-29.1
-29.1
-29.1
-29.1
-24.1
-29.1
-2.5
-22.5
C956 10/50
C957 10/50
R963 100K
Q963 DTC144E
-24.3
5.3
-28.9
D959 SLR-342VCA47
R958 10K
R957 10K
R956 270
D957 1SS119
D956 1SS119
D955 1SS119
D954 1SS119
R959 47K
R960 47K
KI0
KI1
VIDEO S950
SOUND EFECT S952
ABX S954
AUTO P.OFF S956
AUX S951
SEA CONTROL S953
STANDBY S955
VOCAL MASKING DEMO S957
S1 S2 S3 S4 S5 S6 S7 S8 S9 S10 S11 S12 S13 S14 S15
DOWN
UP
1G 2G 3G 4G 5G 6G 7G 8G 9G 10G 11G
V.IND
R920 100
C955 100/10
5.1
5.1
0
REMOCON
①VCC
②OUT
③GND
IC951 SPS-420-1


SYSTEM CONTROL
IC950
MN171202J5T
VDD
S1
S2
S3
S4
S5
S6
S7
S8
S9
S10
S11
S12
S13
S14
S15
VOL DOWN
VPP
VOL UP
1G KO0
2G KO1
3G KO2
4G KO3
5G
6G
7G
8G
9G
10G
11G
ABX IND
VOL IND
OSC1
OSC2
VSS
X2
X1
JOG IN2
JOG IN1
ACO
SPK
TU.RST
D.RST
STBY IND
S.MUTE
D.INH
DCS OUT
DCS IN
INH
RM IN
PRT IN
RST
S.OUT
S.STB
SCK
LATCH
DTAO
DTAI
DSTB
CSB
KI1
KI0
JOG1
JOG2
JS950
QSJ1003-E01
X950
6MHz
C951
220/10
C950
0.022
R950
100
C952
0.047F
5.5
*W601
*W602
D958
SLR-342VCA47
R953
220
R951
100K
R952
47K
D952
1SS119
BALANCE VOL.
VR951
100K
J.C ONLY
ECHO VOL.
VR951
50K
U, UT, US, UP ONLY
BC905
FROM P905 OF ENB-203-3
BAL.R
A.GND
BAL.L
A.GND
MIC
D.GND
V.IND
DOWN
UP
H.P.R
A.GND
H.P.L
JA951
TO JB951 OF ENH-258-1
SPK
PRT
ACO
S.MUTE
DATAOUT
SPIDATA
SPISTB
SPICS
LATCH
STB
DATA
CLK
DCS
D.RST
P.CONT
TU.RST
INH
-12V
+12V
D.GND
+5.6V
F2
F1
-BP
R962
220
R961
1K
D950
1SS119
D951
1SS119
C958
0.01
D953
1SS119
C953
4.7/50
R955
100K
RESET
Q950
DTC114Y
C954
0.01
R954
10K
J
K
L
M
N
O
P
Q
R
S

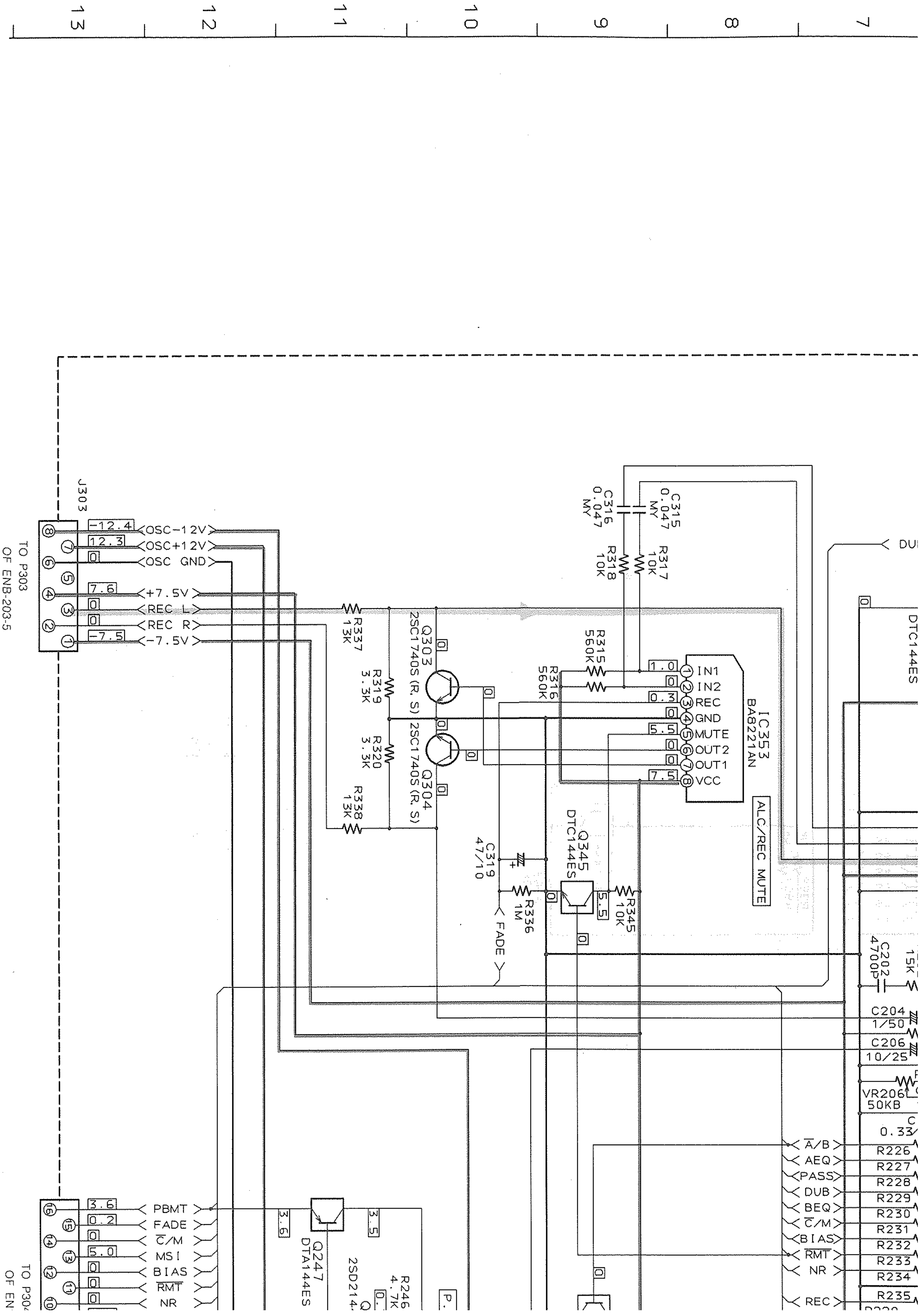
* MARK

	J.C	U, UT, US, UP
W601	NONE	USED
W602	USED	NONE
BC952	NONE	USED

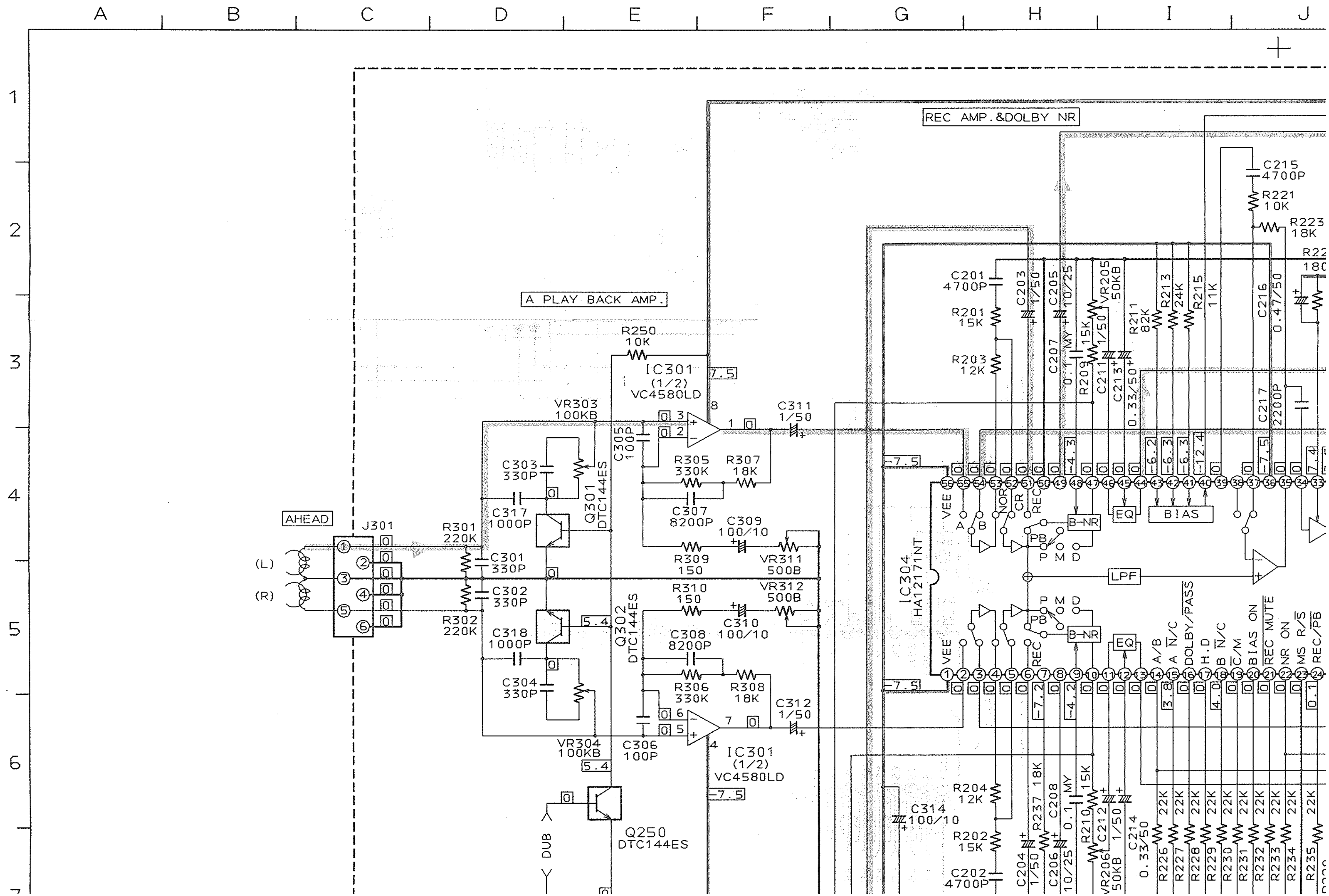
P2-22-a P2-22-b

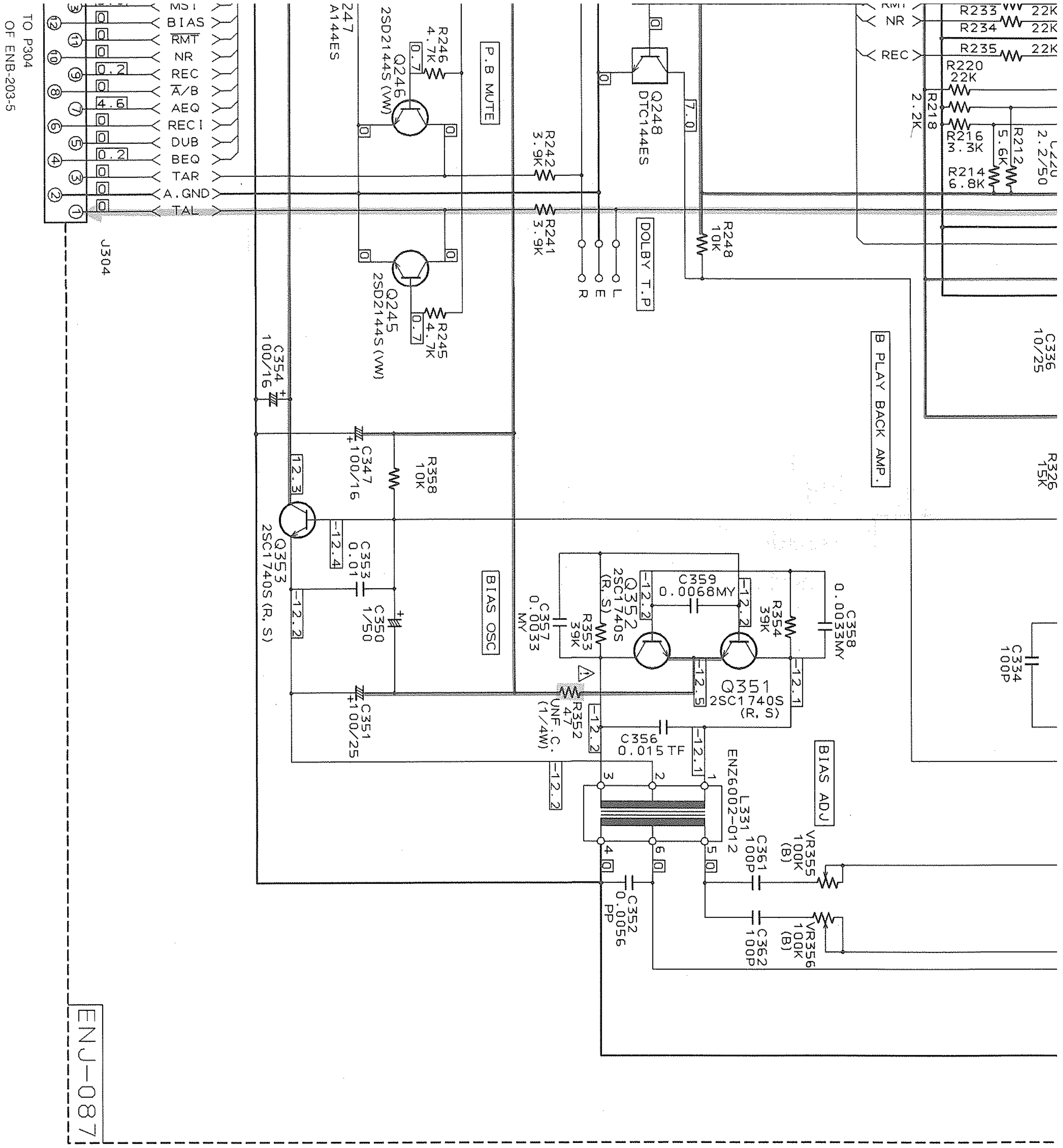

DX-C550
Cassette Amplifier Section
2-22
IC304
HA12170NT

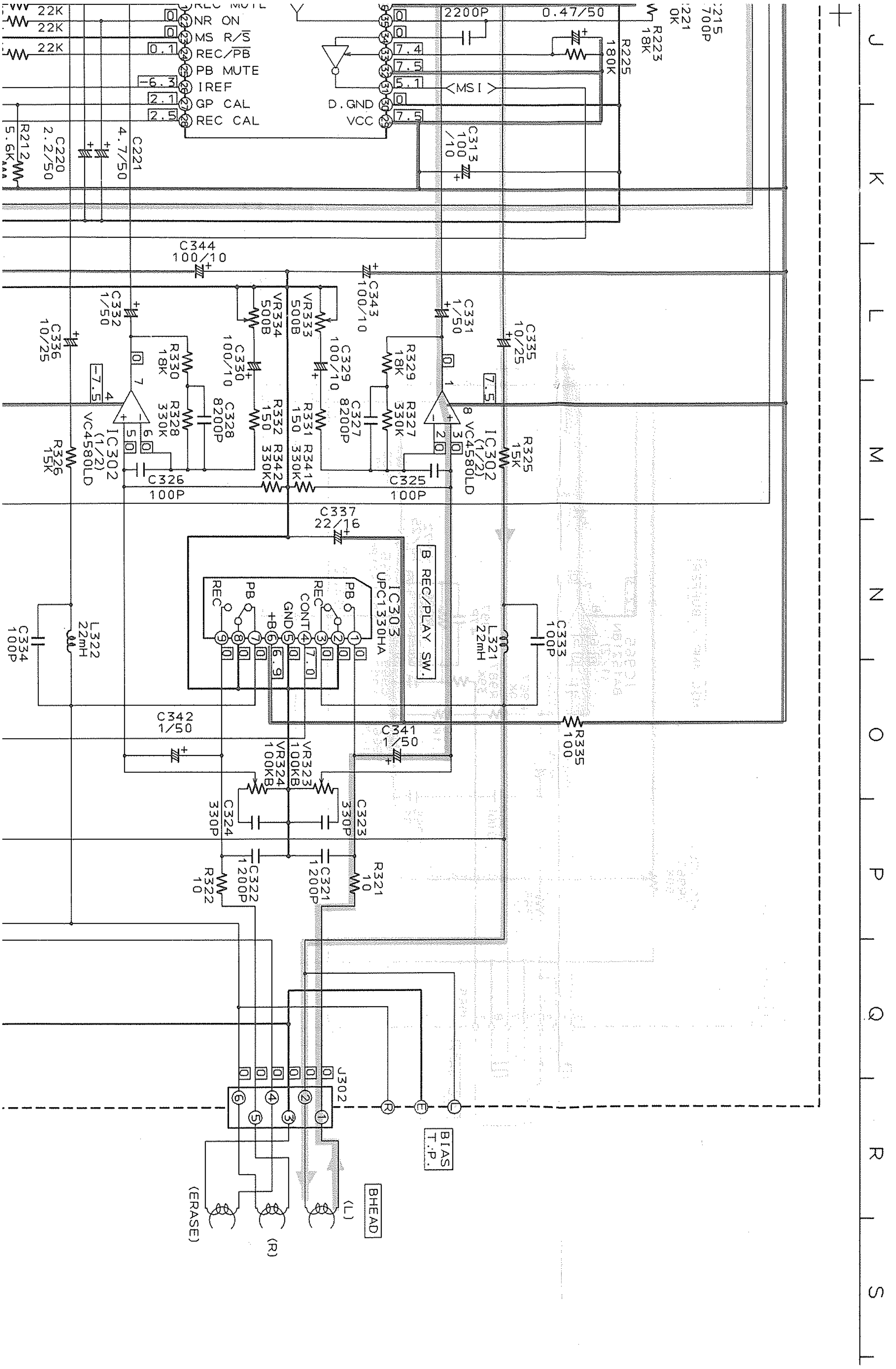
P2-22-c P2-22-d


13
12
11
10
9
8
7
J303
TO P303
OF ENB-203-5
-12.4
OSC-12V
12.3
OSC+12V
0
OSC GND
7.6
+7.5V
0
REC L
0
REC R
-7.5
-7.5V
C316
0.047
MY
C315
0.047
MY
R318
10K
R317
10K
DU
R337
13K
Q303
2SC1740S (R, S)
R319
3.3K
R320
3.3K
Q304
2SC1740S (R, S)
R338
13K
R315
560K
R316
560K
1.0
IN1
0
IN2
0.3
REC
0
GND
5.5
MUTE
0
OUT2
0
OUT1
7.5
VCC
IC353
BA8221AN
ALC/REC MUTE
DTC144ES
C319
47/10
R336
1M
FADE
Q345
DTC144ES
5.5
R345
10K
C202
4700P
15K
C204
1/50
C206
10/25
VR206
50KB
0.33
A/B
AEQ
PASS
DUB
BEQ
C/M
BIAS
RMT
NR
REC
R226
R227
R228
R229
R230
R231
R232
R233
R234
R235
3.6
PBMT
0.2
FADE
0
C/M
5.0
MSI
0
BIAS
0
RMT
0
NR
TO P30
OF EN
3.6
Q247
DTA144ES
3.5
2SD214
R246
4.7K
Q

■ Cassette Amplifier Section

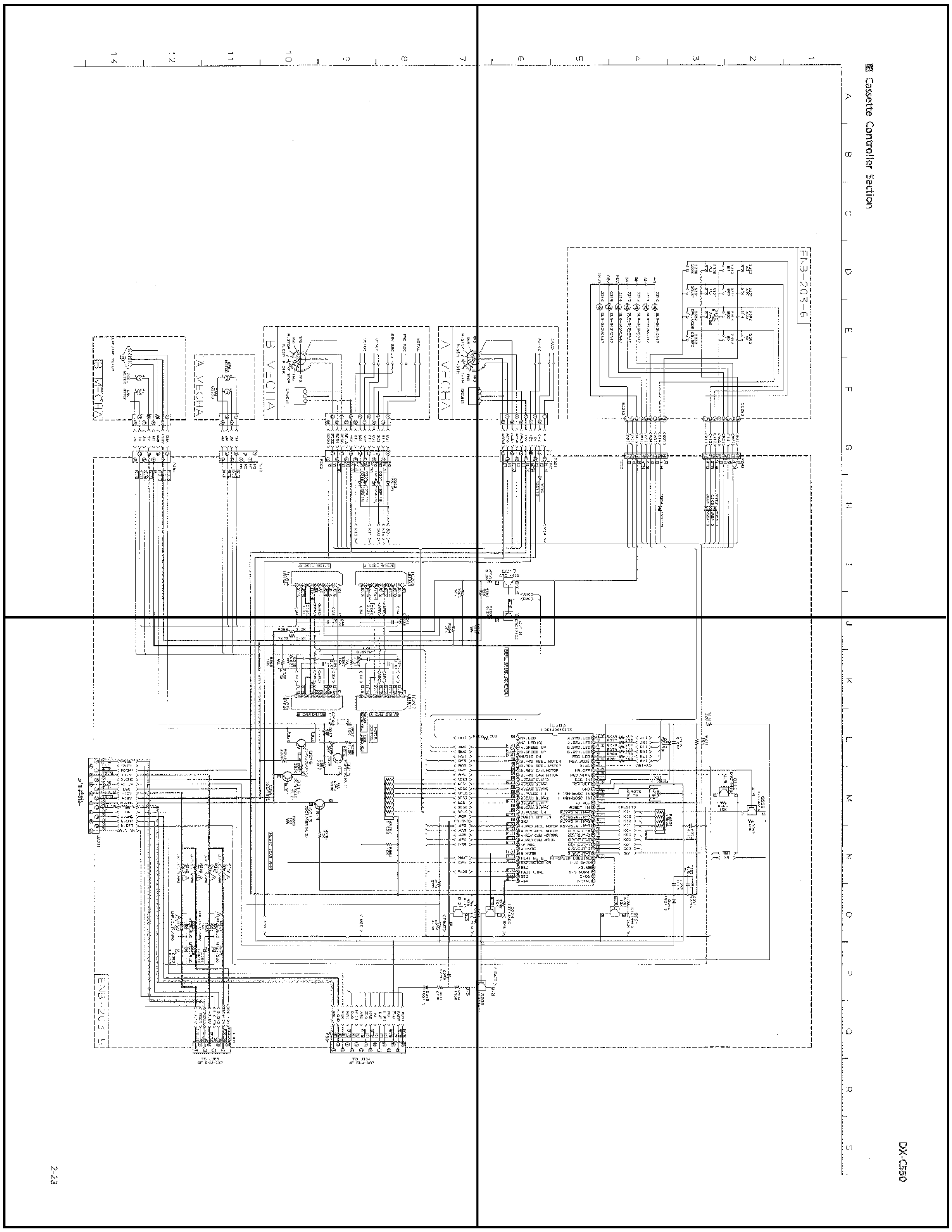

A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
REC AMP.&DOLBY NR
A PLAY BACK AMP.
AHEAD
(L)
(R)
J301
R301 220K
R302 220K
C301 330P
C302 330P
C303 330P
C304 330P
C317 1000P
C318 1000P
Q301 DTC144ES
Q302 DTC144ES
VR303 100KB
VR304 100KB
R250 10K
IC301 (1/2) VC4580LD
C305 100P
C306 100P
R305 330K
R306 330K
R307 18K
R308 18K
C307 8200P
C308 8200P
C309 100/10
C310 100/10
R309 150
R310 150
VR311 500B
VR312 500B
C311 1/50
C312 1/50
Q250 DTC144ES
DUB
7.5
-7.5
5.4
0
IC304 HA12171NT
VEE
A
B
NOR
CR
REC
PB
P M D
B-NR
EQ
BIAS
LPF
A/B
A N/C
DOLBY/PASS
H.D
B N/C
C/M
BIAS ON
REC MUTE
NR ON
MS R/S
REC/PB
C201 4700P
C202 4700P
R201 15K
R202 15K
R203 12K
R204 12K
C203 1/50
C204 1/50
C205 10/25
C206 10/25
C207 0.1 MY
C208 0.1 MY
R209 15K
R210 15K
C211 1/50
C212 1/50
C213 0.33/50
C214 0.33/50
VR205 50KB
VR206 50KB
R211 82K
R213 24K
R215 11K
C215 4700P
R221 10K
R223 18K
C216 0.47/50
C217 2200P
C314 100/10
R237 18K
R226 22K
R227 22K
R228 22K
R229 22K
R230 22K
R231 22K
R232 22K
R233 22K
R234 22K
R235 22K
-7.2
-4.2
3.8
4.0
0.1
-4.3
-6.2
-6.3
-6.3
-12.4
7.4


TO P304
OF ENB-203-5
J304
MST
BIAS
RMT
NR
REC
A/B
AEQ
RECI
DUB
BEQ
TAR
A.GND
TAL
0.2
4.6
P.B MUTE
R246
4.7K
Q246
2SD2144S (VW)
247
A144ES
R245
4.7K
Q245
2SD2144S (VW)
0.7
R242
3.9K
R241
3.9K
Q248
DTC144ES
7.0
DOLBY T.P
R
E
L
R248
10K
B PLAY BACK AMP.
R233 22K
R234 22K
R235 22K
R220
22K
R218
2.2K
R216
3.3K
R212
5.6K
R214
6.8K
2.2/50
C336
10/25
R326
15K
C354
100/16
C347
100/16
R358
10K
Q353
2SC1740S (R, S)
12.3
-12.4
-12.2
C353
0.01
C350
1/50
C351
100/25
BIAS OSC
C357
0.0033
MY
R353
39K
Q352
2SC1740S
(R, S)
C359
0.0068MY
R354
39K
C358
0.0033MY
Q351
2SC1740S
(R, S)
-12.1
-12.5
R352
47
UNF.C.
(1/4W)
C356
0.015TF
L331
ENZ6002-012
BIAS ADJ
VR355
100K
(B)
C361
100P
VR356
100K
(B)
C362
100P
C352
0.0056
PP
C334
100P
ENJ-087


NR ON
MS R/S
REC/PB
PB MUTE
IREF
GP CAL
REC CAL
D.GND
VCC
<MSI>
2200P
0.47/50
R223 18K
R225 180K
C313 100/10
R212 5.6K
C220 2.2/50
C221 4.7/50
C344 100/10
C343 100/10
C332 1/50
C331 1/50
C336 10/25
C335 10/25
VR334 500B
VR333 500B
C330 100/10
C329 100/10
R330 18K
R329 18K
R328 330K
R327 330K
C328 8200P
C327 8200P
R332 150
R331 150
R342 330K
R341 330K
IC302 (1/2) VC4580LD
R326 15K
R325 15K
C326 100P
C325 100P
C337 22/16
IC303 UPC1330HA
B. REC/PLAY SW.
REC
PB
GND
+B
CONT
L322 22mH
L321 22mH
C334 100P
C333 100P
C342 1/50
C341 1/50
R335 100
VR324 100KB
VR323 100KB
C324 330P
C323 330P
C322 1200P
C321 1200P
R322 10
R321 10
J302
BIAS T.P.
BHEAD
(L)
(R)
(ERASE)
J
K
L
M
N
O
P
Q
R
S

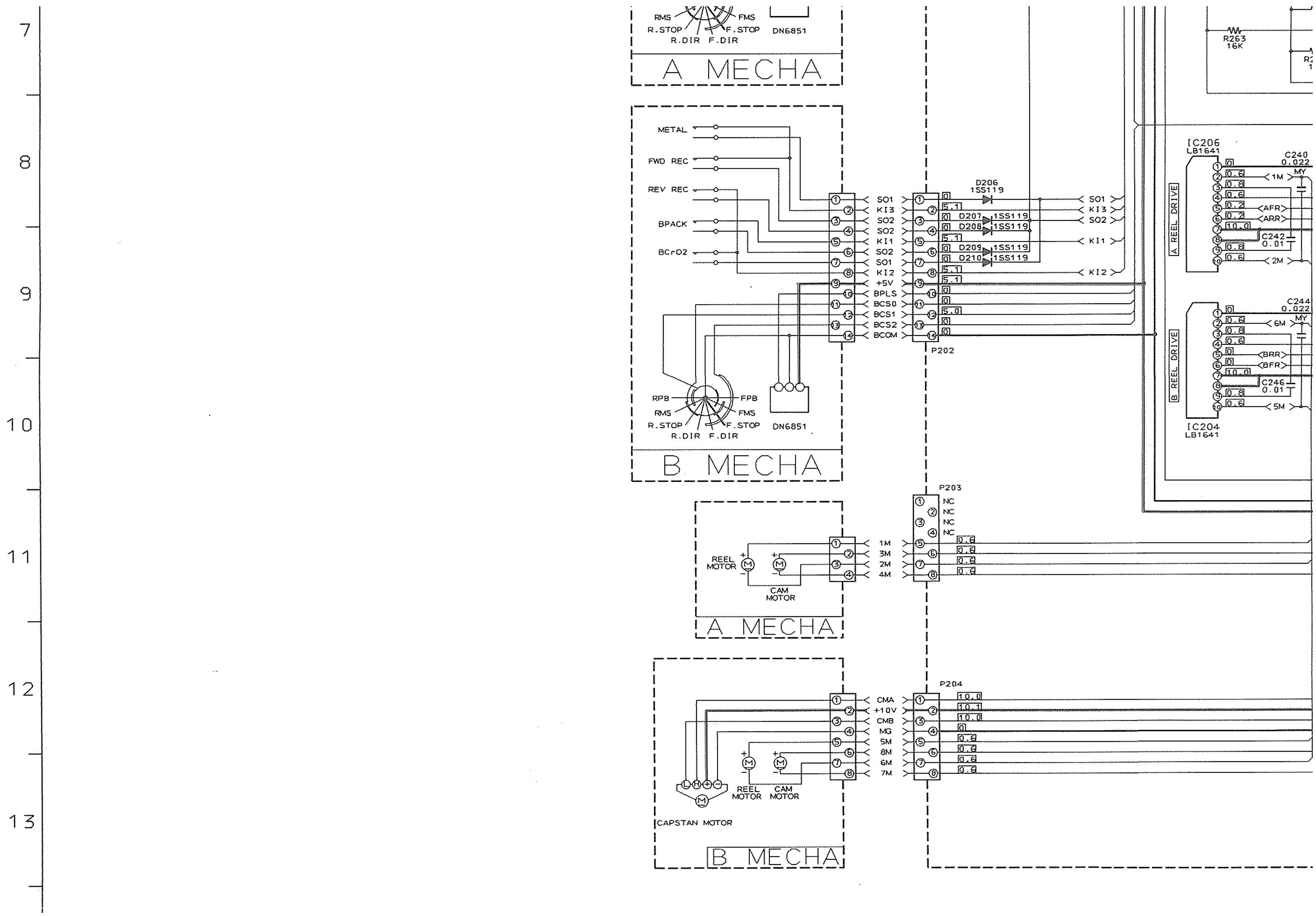
P2-23-a

P2-23-b

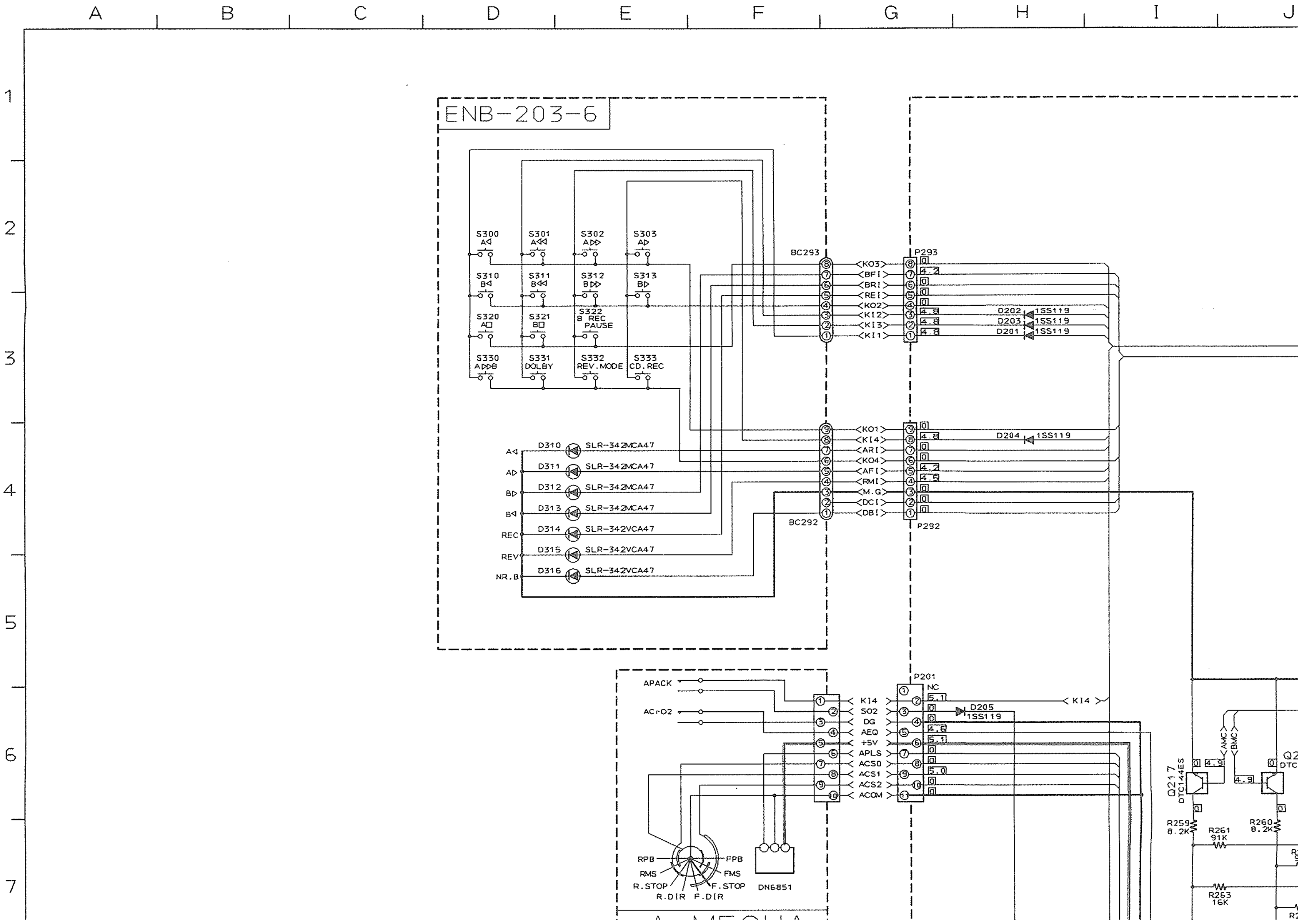

Cassette Controller Section
DX-C550
2-23
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
Q
R
S
1
2
3
4
5
6
7
8
9
10
11
12
13
FN3-203-6
A MECHA
B MECHA
A M-CHA
B M-CHA
IC203
EN3-203-L

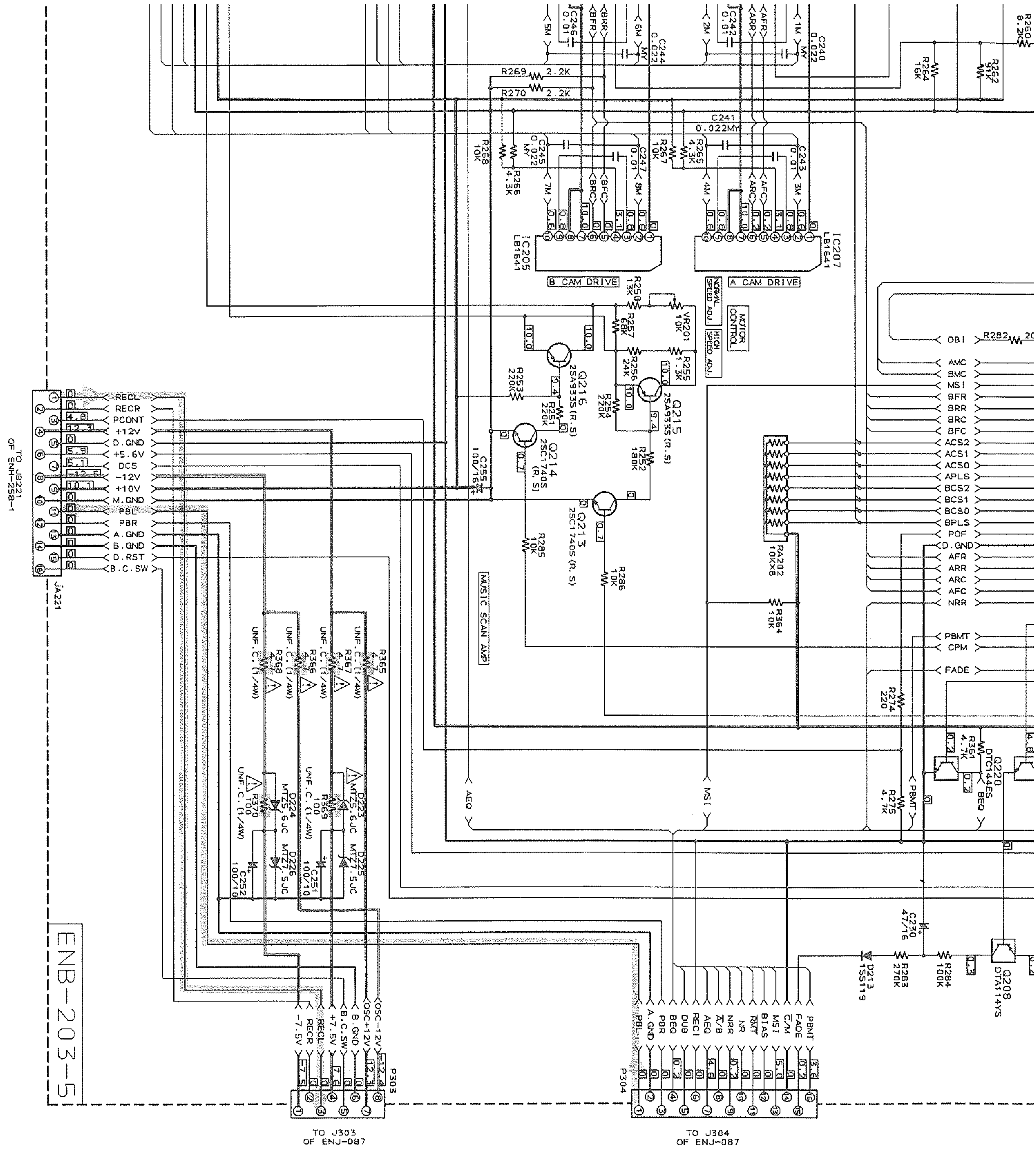
P2-23-c

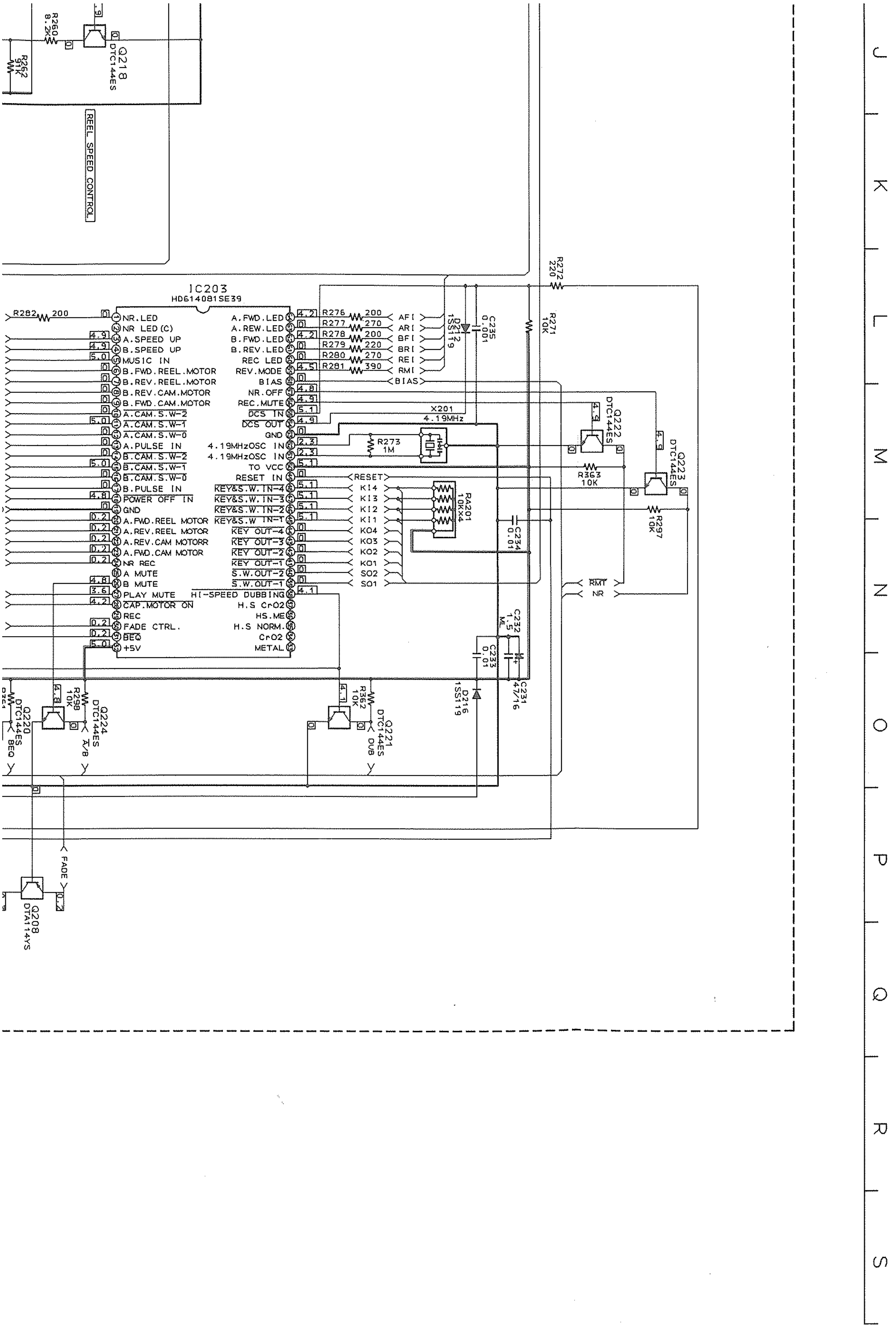
P2-23-d


7
8
9
10
11
12
13
A MECHA
RMS
R.STOP
R.DIR F.DIR
FMS
F.STOP
DN6851
METAL
FWD REC
REV REC
BPACK
BCrO2
RPB
FPB
B MECHA
SO1
KI3
SO2
SO2
KI1
SO2
SO1
KI2
+5V
BPLS
BCS0
BCS1
BCS2
BCOM
P202
D206
1SS119
D207
D208
D209
D210
1SS119
5.1
5.0
KI1
KI2
P203
NC
1M
3M
2M
4M
0.6
REEL MOTOR
CAM MOTOR
A MECHA
P204
CMA
+10V
CMB
MG
5M
8M
6M
7M
10.0
10.1
CAPSTAN MOTOR
B MECHA
R263
16K
IC206
LB1641
C240
0.022
MY
1M
AFR
ARR
C242
0.01
2M
A REEL DRIVE
IC204
LB1641
C244
0.022
6M
BRR
BFR
C246
0.01
5M
B REEL DRIVE

Cassette Controller Section


A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
ENB-203-6
S300 A◁
S301 A◁◁
S302 A▷▷
S303 A▷
S310 B◁
S311 B◁◁
S312 B▷▷
S313 B▷
S320 A□
S321 B□
S322 B REC PAUSE
S330 A▷▷B
S331 DOLBY
S332 REV.MODE
S333 CD.REC
D310 SLR-342MCA47
D311 SLR-342MCA47
D312 SLR-342MCA47
D313 SLR-342MCA47
D314 SLR-342VCA47
D315 SLR-342VCA47
D316 SLR-342VCA47
A◁
A▷
B▷
B◁
REC
REV
NR.B
BC293
BC292
P293
P292
KO3
BFI
BRI
REI
KO2
KI2
KI3
KI1
KO1
KI4
ARI
KO4
AFI
RMI
M.G
DCI
DBI
D202 1SS119
D203 1SS119
D201 1SS119
D204 1SS119
4.2
4.8
4.5
0
APACK
ACrO2
P201
NC
K14
SO2
DG
AEQ
+5V
APLS
ACS0
ACS1
ACS2
ACOM
5.1
4.6
5.0
D205 1SS119
RPB
RMS
R.STOP
R.DIR
F.DIR
F.STOP
FMS
FPB
DN6851
AMC
BMC
Q217 DTC144ES
4.9
R259 8.2K
R261 91K
R260 8.2K
R263 16K


ENB-203-5
IC205 LB1641
B CAM DRIVE
IC207 LB1641
A CAM DRIVE
MOTOR CONTROL
NORMAL SPEED ADJ.
HIGH SPEED ADJ.
VR201 10K
Q216 2SA933S (R.S)
Q215 2SA933S (R.S)
Q214 2SC1740S (R.S)
Q213 2SC1740S (R.S)
MUSIC SCAN AMP
RA202 10K×8
Q220 DTC144ES
Q208 DTA114YS
D213 1SS119
D223 MTZ5.6JC
D224 MTZ5.6JC
D225 MTZ7.5JC
D226 MTZ7.5JC
C251 100/10
C252 100/10
C255 100/16
C230 47/16
JA221
TO JB221 OF ENH-258-1
RECL
RECR
PCONT
+12V
D.GND
+5.6V
DCS
-12V
+10V
M.GND
PBL
PBR
A.GND
B.GND
D.RST
B.C.SW
P303
TO J303 OF ENJ-087
-7.5V
RECR
RECL
+7.5V
B.C.SW
B.GND
OSC+12V
OSC-12V
P304
TO J304 OF ENJ-087
PBL
A.GND
PBR
BEQ
DUB
RECI
AEQ
A/B
NRR
NR
RMT
BIAS
MSI
C/M
FADE
PBMT
DBI
AMC
BMC
MSI
BFR
BRR
BRC
BFC
ACS2
ACS1
ACS0
APLS
BCS2
BCS1
BCS0
BPLS
POF
D.GND
AFR
ARR
ARC
AFC
NRR
PBMT
CPM
FADE
AEQ
MSI
BEQ
UNF.C.(1/4W)


IC203
HD614081SE39
REEL SPEED CONTROL
Q218
DTC144ES
R260
8.2K
R262
91K
R282 200
NR.LED
NR LED (C)
A.SPEED UP
B.SPEED UP
MUSIC IN
B.FWD.REEL.MOTOR
B.REV.REEL.MOTOR
B.REV.CAM.MOTOR
B.FWD.CAM.MOTOR
A.CAM.S.W-2
A.CAM.S.W-1
A.CAM.S.W-0
A.PULSE IN
B.CAM.S.W-2
B.CAM.S.W-1
B.CAM.S.W-0
B.PULSE IN
POWER OFF IN
GND
A.FWD.REEL MOTOR
A.REV.REEL MOTOR
A.REV.CAM MOTORR
A.FWD.CAM MOTOR
NR REC
A MUTE
B MUTE
PLAY MUTE
CAP.MOTOR ON
REC
FADE CTRL.
BEQ
+5V
A.FWD.LED
A.REW.LED
B.FWD.LED
B.REV.LED
REC LED
REV.MODE
BIAS
NR.OFF
REC.MUTE
DCS IN
DCS OUT
GND
4.19MHzOSC IN
4.19MHzOSC IN
TO VCC
RESET IN
KEY&S.W.IN-4
KEY&S.W.IN-3
KEY&S.W.IN-2
KEY&S.W IN-1
KEY OUT-4
KEY OUT-3
KEY OUT-2
KEY OUT-1
S.W.OUT-2
S.W.OUT-1
HI-SPEED DUBBING
H.S CrO2
HS.ME
H.S NORM.
CrO2
METAL
R276 200
R277 270
R278 200
R279 220
R280 270
R281 390
AFI
ARI
BFI
BRI
REI
RMI
BIAS
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1SS119
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220
R271
10K
X201
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R273
1M
RESET
KI4
KI3
KI2
KI1
KO4
KO3
KO2
KO1
SO2
SO1
RA201
10KX4
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DTC144ES
Q223
DTC144ES
R363
10K
R297
10K
RMT
NR
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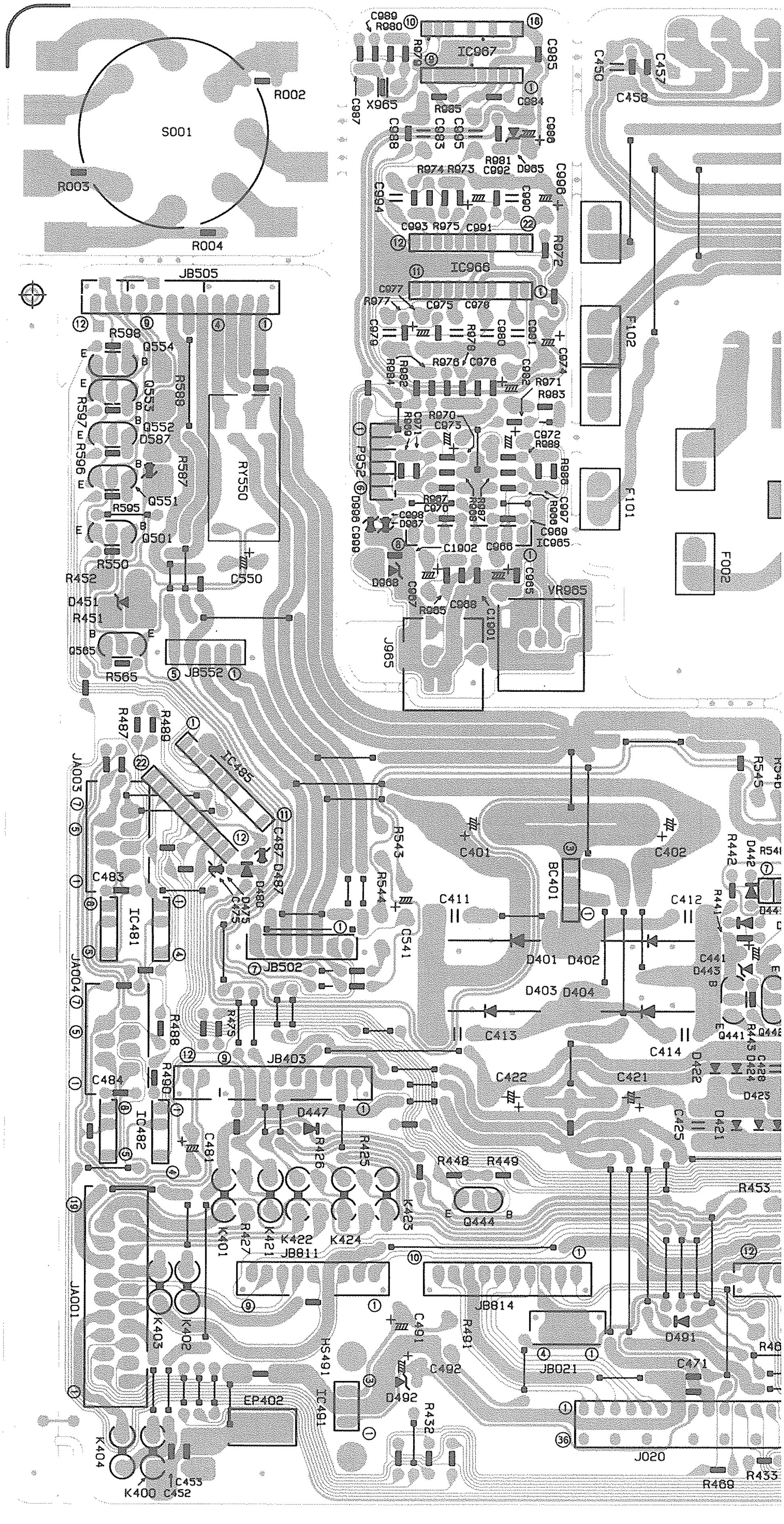
1.5
ML
C233
0.01
C231
47/16
D216
1SS119
Q220
DTC144ES
BEQ
R298
10K
Q224
DTC144ES
A/B
R362
10K
Q221
DTC144ES
DUB
FADE
Q208
DTA114YS
4.2
4.9
5.0
5.1
4.5
4.8
2.3
0.2
3.6
4.1
J
K
L
M
N
O
P
Q
R
S

DX-C550

Printed Circuit Boards

■ Power amp & Power supply P.C. Board (ENH-258)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C991
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D997
C999
C1002
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C1001
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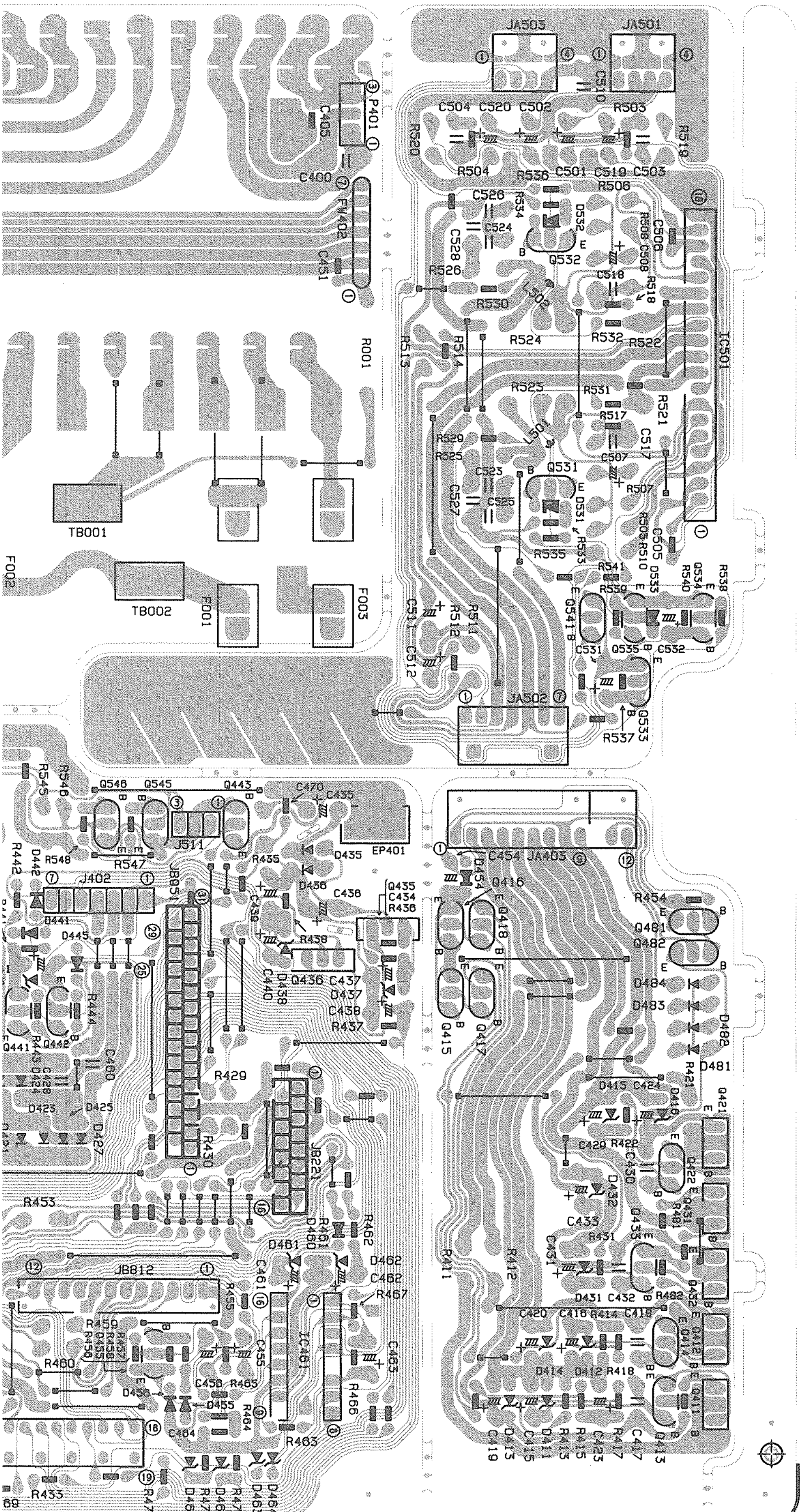
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R510
C505
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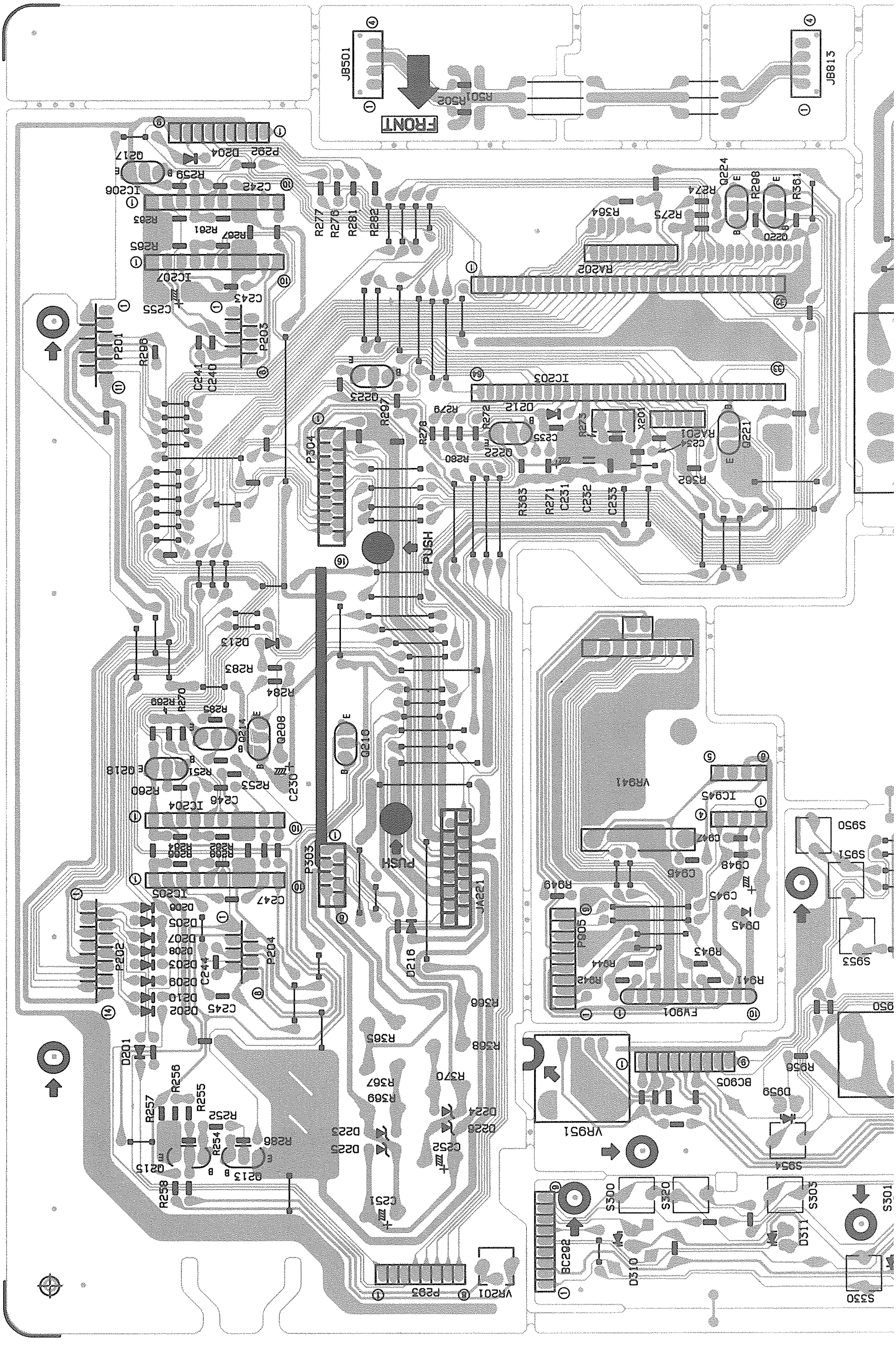
■ Mech control, Source select & Front P.C. Board (ENB-203)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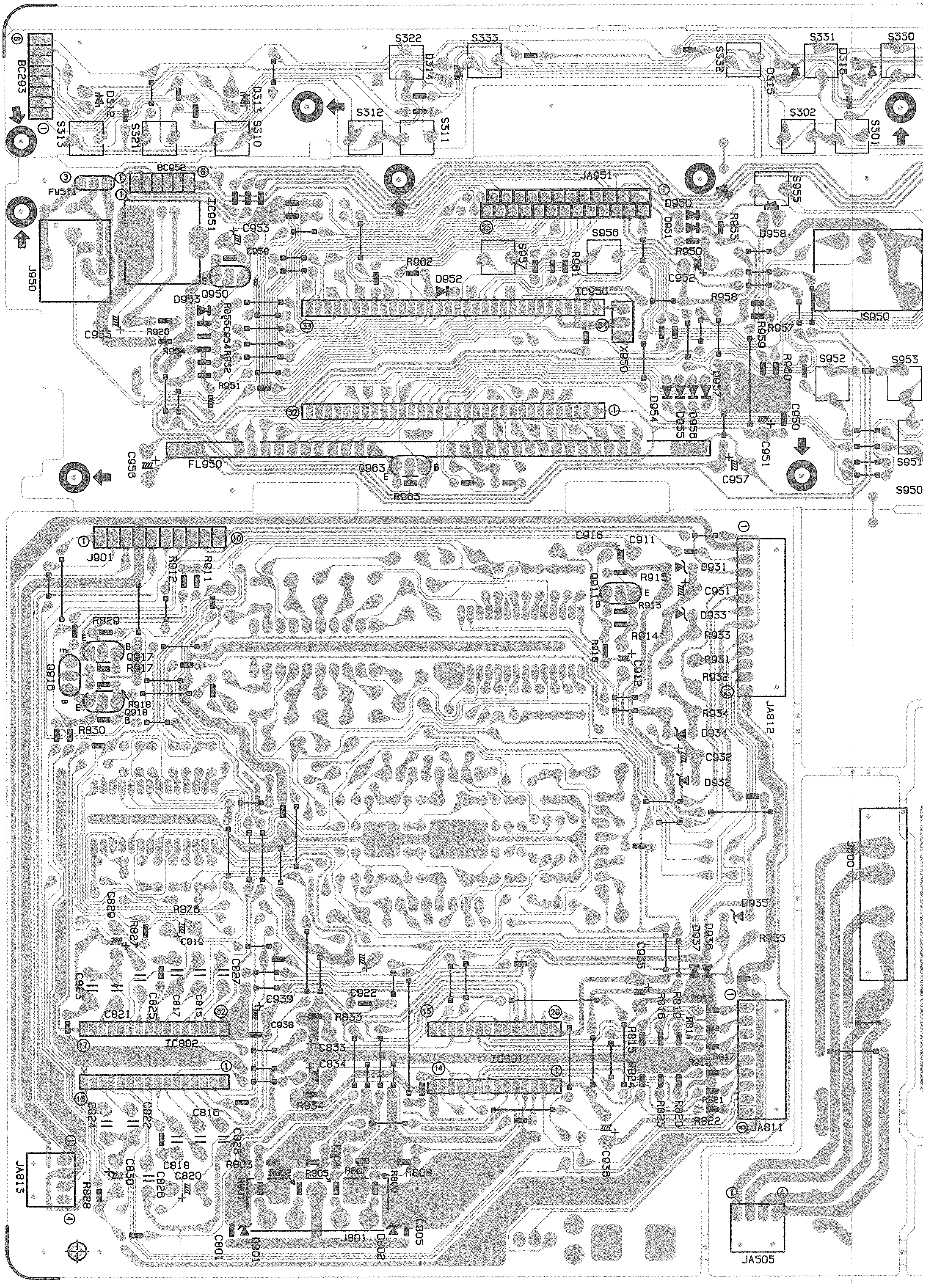
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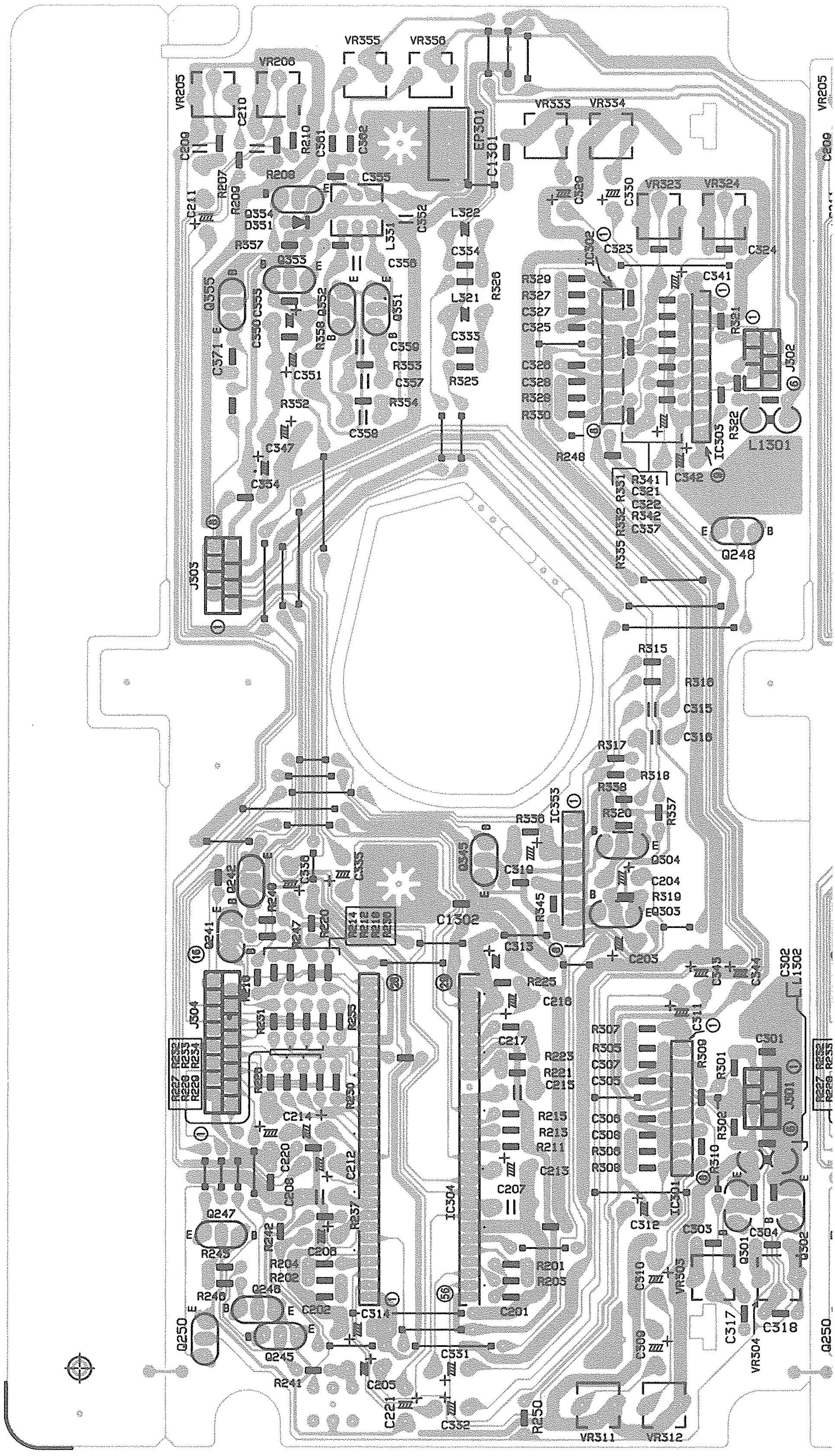
E
B

■ Cassette amp P.C. Board (ENJ-087)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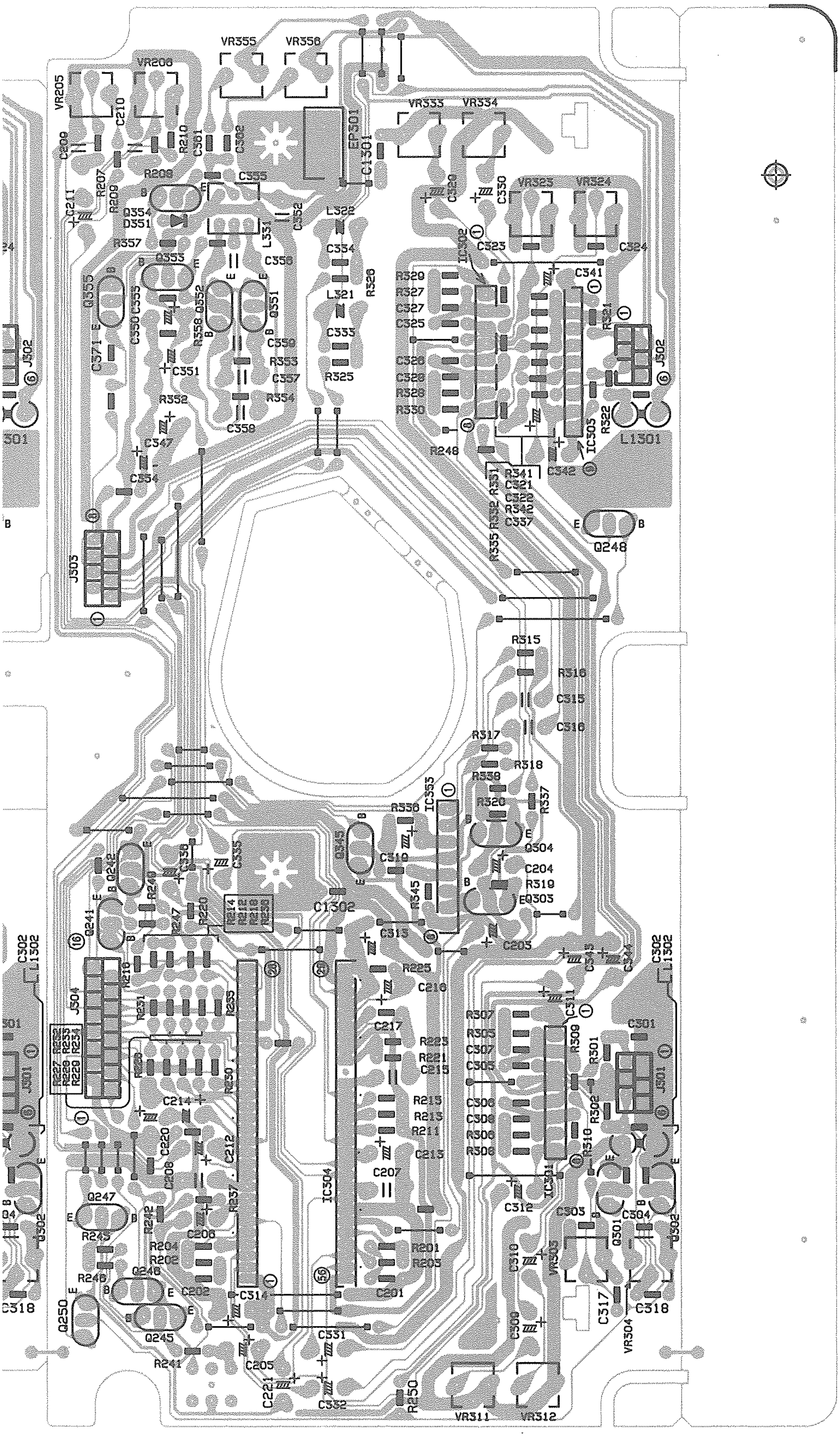
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C332
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VR311
VR312

XT-C550

– Contents –

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Adjustment Procedures 3-20

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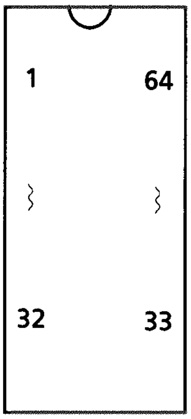
Block Diagram 3-30

Schematic Diagrams/Printed Circuit Boards 3-33

Description of Major LSIs

■ MN171602J5R (IC790) : TUNER SYSTEM CONTROLLER

1. Terminal Layout



2. Key Matrix

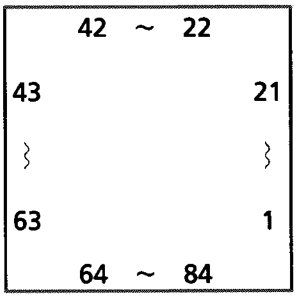
	KEY IN 0	KEY IN 1	KEY IN2	KEY IN3
KEY OUT 0	—	DAILY	REC	SLEEP
KEY OUT 1	HOUR	MINUTE	CLOCK ADJ	MEMORY
KEY OUT 2	UP	DOWN	PRESET UP	PRESET DOWN
KEY OUT 3	FM	AM	VOLUME POSITON	SOURCE /RECTIME

3. Description

Pin No.	symbol	I/O	Description	Pin No.	symbol	I/O	Description
1	VDD	--	Power supply	33	KO1	O	Key matrix output
2	S20	O	FL segment control output	34	KO2	O	Key matrix output
3	S19	O	FL segment control output	35	KO3	O	Key matrix output
4	S18	O	FL segment control output	36	KI0	I	Key matrix input
5	S17	O	FL segment control output	37	KI1	I	Key matrix input
6	S16	O	FL segment control output	38	KI2	I	Key matrix input
7	S15	O	FL segment control output	39	KI3	I	Key matrix input
8	S14	O	FL segment control output	40	/COMCLK	O	Communication clock to CD μ-com
9	S13	O	FL segment control output	41	/COMDATA	O	Communication data to CD μ-com
10	S12	O	FL segment control output	42	/COMRDY	O	Communication ready to CD μ-com
11	S11	O	FL segment control output	43	/RST	I	Reset signal input
12	S10	O	FL segment control output	44	/INH	I	Inhibit signal for tuner controller
13	S9	O	FL segment control output	45	/STEREO	I	For the indication "STEREO"
14	S8	O	FL segment control output	46	/TUNED	I	For the indication "TUNED"
15	S7	O	FL segment control output	47	IF DATA	I	Data from PLL synthesizer
16	S6	O	FL segment control output	48	TU DATA	O	Data for PLL synthesizer
17	S5	O	FL segment control output	49	CK	O	Clock for PLL synthesizer
18	−BP	--	Power supply for FL display	50	CE	O	Chip enable signal for PLL synthesizer
19	S4	O	FL segment control output	51	MUTE	O	Muting tuner sound
20	S3	O	FL segment control output	52	/DCS IN	I	Compulink signal input
21	S2	O	FL segment control output	53	/DCS OUT	O	Compulink signal output
22	S1	O	FL segment control output	54	f out	O	Clock frequency
23	G9	O	FL grid control output	55	TEST	--	Test mode terminal
24	G8	O	FL grid control output	56	CS0	I	Chip select. L: , H:
25	G7	O	FL grid control output	57	CS1	I	Chip select. L: , H:
26	G6	O	FL grid control output	58	CS2	I	Chip select. L:10k, H:9k
27	G5	O	FL grid control output	59	CS3	I	Chip select. L:24H, H:12H
28	G4	O	FL grid control output	60	X1	--	Connected to GND
29	G3	O	FL grid control output	61	X2	--	Not used
30	G2	O	FL grid control output	62	VSS	--	GND
31	G1	O	FL grid control output	63	OSC2	I/O	Clock oscillation terminal
32	KO0	O	Key matrix output	64	OSC1	I/O	Clock oscillation terminal

■ MN172412J5N2 (IC780) : CD SYSTEM CONTROLLER

1. Terminal Layout



2. Key Matrix

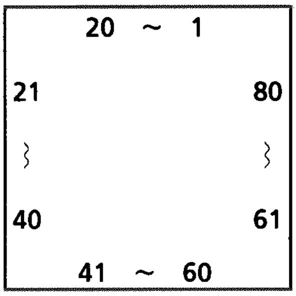
	KEY IN 0	KEY IN 1	KEY IN2	KEY IN3
KEY OUT 1	1	2	3	4
KEY OUT 2	5	6	7	8
KEY OUT 3	9	10	+10	—
KEY OUT 4	DOOR O/C	D5	D6	—
KEY OUT 5	EDIT	INTRO	CALL	P.MODE
KEY OUT 6	—	—	SIDE A/B	■/CANCEL
KEY OUT 7	D1	D2	P1	▶/❚❚
KEY OUT 8	D4	EJECT	P1 O/C	D3

3. Description

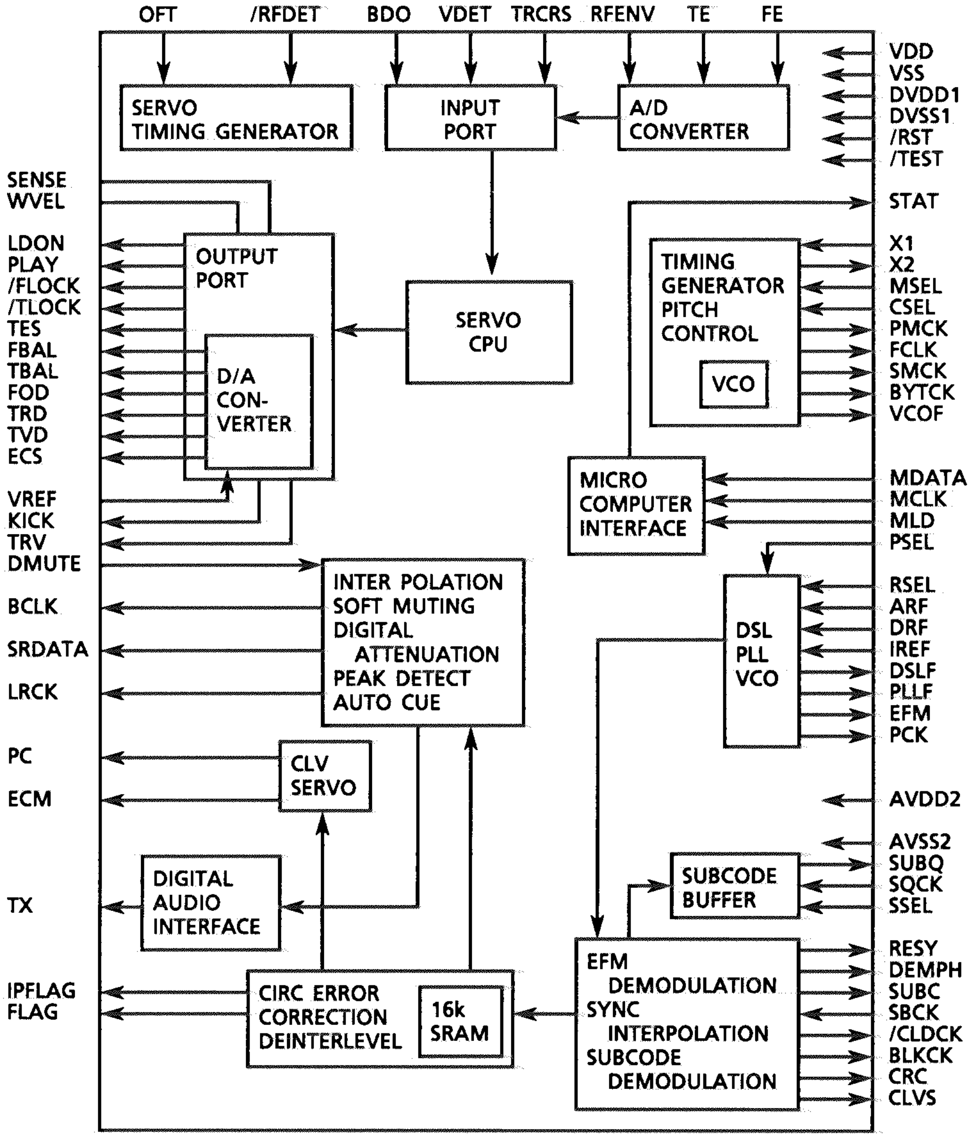
Pin No.	symbol	I/O	Description	Pin No.	symbol	I/O	Description
1	KEY OUT3	O	Key matrix output	43	MDATA	O	µ-com command data output
2	KEY OUT4	O	Key matrix output	44	P.OFF	O	CD+5V CONTROL H : power off, L : power on.
3	KEY OUT5	O	Key matrix output	45	SQCK	O	80-bit Sub Q and 16-bit PCM Peak Level Data
4	KEY OUT6	O	Key matrix output	46	SUBQ	I	Sub-code Q-code input
5	KEY OUT7	O	Key matrix output	47	MLD	O	µ-com command load signal output
6	KEY OUT8	O	Key matrix output	48	STATUS	I	Status signal input
7		–	Connected to GND	49	/TLOCK	I	Lock signal for Tracking
8		–	Connected to GND	50	/FLOCK	I	Lock signal for Focus
9	DGT13	–	Connected to GND	51	TCIA	–	Connected to GND
10	TEST	I	Connected to GND	52	IRQ2	I	Communication ready from TUNER µ-com
11	KEY IN0	I	Key matrix input	53	COM CLK	I	Communication clock from TUNER µ-com
12	KEY IN1	I	Key matrix input	54	TBLO	I	Communication data from TUNER µ-com
13	KEY IN2	I	Key matrix input	55	DCS IN	I	Compulink signal input
14	KEY IN3	I	Key matrix input	56	DCS OUT	O	Compulink signal output
15	PLAY LED	–	Not used	57	OPEN/LOAD	O	P1 Open or Load
16	P1 LED	O	P1 indicator signal output	58	CLOSE/UNLOAD	O	P1 Close or Unload driving control signal
17	D1 LED	O	DISC1 indicator signal output	59	SD	O	Load drive speed down output
18	D2 LED	O	DISC2 indicator signal output	60	/PU REST	I	Pick up rest switch input
19	D3 LED	O	DISC3 indicator signal output	61	/LOAD SW	I	Disc load detect signal
20	D4 LED	O	DISC4 indicator signal output	62	/JAB SW	I	JAB switch signal
21	D5 LED	O	DISC5 indicator signal output	63	/MAG IN SW	I	Magazine in signal
22	D6 LED	O	DISC6 indicator signal output	64	UP	O	Lifter driving control signal
23		–	Connected to GND	65	DOWN	O	Lifter driving control signal
24		–	Connected to GND	66	SCL	I	Serial clock input
25		–	Connected to GND	67	SDA	I	Serial data input
26		–	Connected to GND	68	RESET	I	Reset signal input
27		–	Connected to GND	69	X1	–	Connected to GND
28		–	Connected to GND	70	X2	–	Not used
29		–	Connected to GND	71	VSS	–	GND
30		–	Connected to GND	72	OSC2	O	Clock oscillation output
31		–	Connected to GND	73	OSC1	I	Clock oscillation input
32		–	Connected to GND	74	VDD	–	Power supply
33		–	Connected to GND	75	PHOTO SW	I	Photo diode switch
34		–	Connected to GND	76		–	Connected to GND
35		–	Connected to GND	77	/CLOSE SW	I	"L" with tray closed
36		–	Connected to GND	78	/OPEN SW	I	"L" with tray opened
37	MS0	I	Mode select	79	/FD CLOSE SW	I	"L" with Front Door closed
38	MS1	I	Mode select	80	/FD OPEN SW	I	"L" with Front Door opened
39	SED15	–	Connected to GND	81	DGT25/HOME.pos	I	Reset signal input
40	/RST	O	System Reset signal output	82	DGT24	–	Connected to GND
41	MCLK	O	µ-com command clock signal output	83	KEY OUT1	O	Key matrix output
42	SENSE	I	SENSE signal input	84	KEY OUT2	O	Key matrix output

■ MN662720RB (IC650) : DIGITAL SERVO & DIGITAL SIGNAL PROCESSER

1. Terminal Layout


20 ~ 1
21
80
40
61
41 ~ 60

2. Block Diagram


OFT
/RFDET
BDO
VDET
TRCRS
RFENV
TE
FE
SERVO TIMING GENERATOR
INPUT PORT
A/D CONVERTER
VDD
VSS
DVDD1
DVSS1
/RST
/TEST
STAT
SENSE
WVEL
LDON
PLAY
/FLOCK
/TLOCK
TES
FBAL
TBAL
FOD
TRD
TVD
ECS
OUTPUT PORT
D/A CON-VERTER
SERVO CPU
TIMING GENERATOR PITCH CONTROL
VCO
X1
X2
MSEL
CSEL
PMCK
FCLK
SMCK
BYTCK
VCOF
MICRO COMPUTER INTERFACE
MDATA
MCLK
MLD
PSEL
VREF
KICK
TRV
DMUTE
INTER POLATION
SOFT MUTING
DIGITAL ATTENUATION
PEAK DETECT
AUTO CUE
BCLK
SRDATA
LRCK
DSL PLL VCO
RSEL
ARF
DRF
IREF
DSLF
PLLF
EFM
PCK
PC
ECM
CLV SERVO
AVDD2
AVSS2
SUBQ
SQCK
SSEL
SUBCODE BUFFER
TX
DIGITAL AUDIO INTERFACE
IPFLAG
FLAG
CIRC ERROR CORRECTION DEINTERLEVEL
16k SRAM
EFM DEMODULATION
SYNC INTERPOLATION
SUBCODE DEMODULATION
RESY
DEMPH
SUBC
SBCK
/CLDCK
BLKCK
CRC
CLVS

3. Description

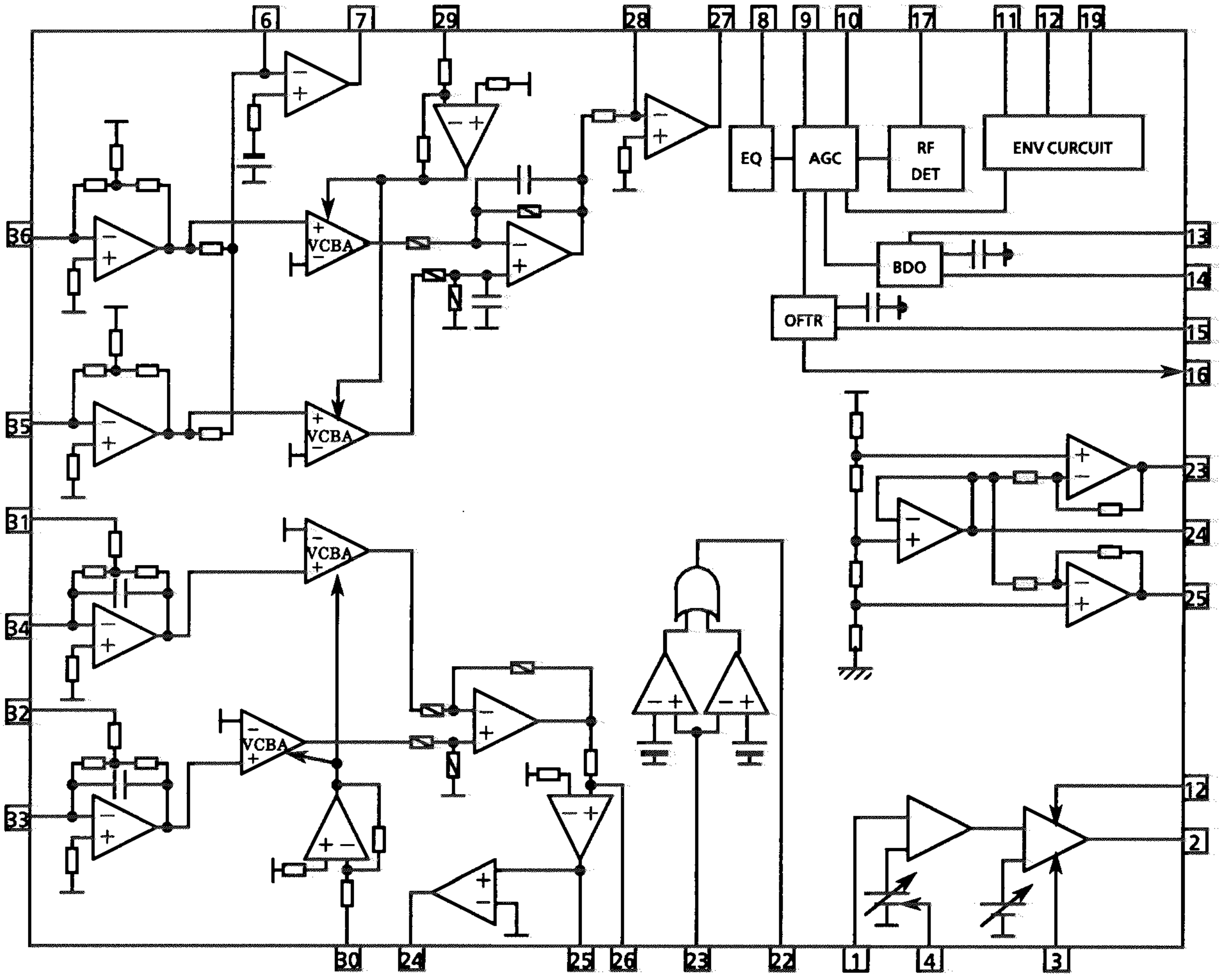
Pin No.	symbol	I/O	Description	Pin No.	symbol	I/O	Description
1	BCLK	O	Bit clock output pin for SRDATA	41	TES	—	Not used
2	LRCK	O	L/R distinction signal	42	PLAY	—	Not used
3	SRDATA	O	Serial data output	43	WVEL	—	Not used
4	DVDD1	—	Power supply	44	ARF	I	RF signal input
5	DVSS1	—	Connected to GND	45	IREF	I	Reference current input pin
6	TX	O	Digital audio interface signal	46	DRF	I	Bias adjustment pin for DSL
7	MCLK	I	µ-com command clock signal input	47	DSLF	I/O	Loop filter pin for DSL
8	MDATA	I	µ-com command data input	48	PLLF	I/O	Loop filter pin for PLL
9	MLD	I	µ-com command load signal input	49	VCOF	—	Not used
10	SENSE	O	Sense signal output	50	AVDD2	—	Power supply
11	FLOCK	O	Lock signal for Tracking	51	AVSS2	—	Connected to GND
12	TLOCK	O	Lock signal for Focus	52	EFM	—	Not used
13	BLKCK	—	Not used	53	PCK	—	Not used
14	SQCK	I	Clock for sub-code Q resister	54	PDO	—	Not used
15	SUBQ	O	Sub-code Q-code output	55	SUBC	—	Not used
16	DMUTE	I	Muting input (H : MUTE)	56	SBCK	—	Not used
17	STATUS	O	Status signal	57	VSS	—	Connected to GND
18	/RST	I	Reset signal input (L:Reset)	58	X1	I	Input of 16.9344MHz X'tal oscillation circuit
19	SMCK	—	Not used	59	X2	—	Not used
20	PMCK	—	Not used	60	VDD	—	Power supply
21	TRV	O	Traverse enforced output	61	BYTCK	—	Not used
22	TVD	O	Traverse drive output	62	CLDCK	—	Not used
23	PC	—	Not used	63	FCLK	—	Not used
24	ECM	O	Spindle motor drive signal (Enforced output) 3-State	64	IPPLAG	—	Not used
25	ECS	O	Spindle motor drive signal (Servo signal)	65	FLAG	—	Not used
26	KICK	O	Kick pulse output	66	CLVS	—	Not used
27	TRD	O	Tracking drive output	67	CRC	—	Not used
28	FOD	O	Focus drive output	68	DEMPH	O	De-emphasis ON signal (H : ON)
29	VREF	I	Reference voltage input pin	69	RESY	—	Not used
30	FBAL	O	Focus Balance adjust signal output	70	NC1	—	Connected to GND
31	TBAL	O	Tracking Balance adjust signal output	71	/TEST	—	Pull up (+5V)
32	FE	I	Focus error signal input	72	AVDD1	—	Power supply
33	TE	I	Tracking error signal input	73	NC2	—	Not used
34	RF ENV	I	RF envelope signal input	74	AVSS1	—	Connected to GND
35	VDET	I	Vibration detect signal input	75	NC2	—	Not used
36	OFT	I	Off track signal input	76	RSEL	—	Pull up (+5V)
37	TRCRS	I	Track cross signal input	77	CSEL	—	Connected to GND
38	/RFDET	I	RF detect signal input	78	PSEL	—	Connected to GND
39	BDO	I	BDO input pin	79	MSEL	—	Connected to GND
40	LDON	O	Laser ON signal output	80	SSEL	—	Pull up (+5V)

■ AN8806SB (IC600) : RF & SERVO AMP

1. Terminal Layout

PD	1	36	PDAC
LD	2	35	PDBD
LDON	3	34	PDE
LDP	4	33	PDF
VCC	5	32	PDER
RF-	6	31	PDFR
RF OUT	7	30	TBAL
RF IN	8	29	FBAL
C.AGC	9	28	FE-
ARF	10	27	FE OUT
C.ENV	11	26	TE-
C.EA	12	25	TE OUT
CS BDO	13	24	CROSS
BDO	14	23	TE BPF
CS BRT	15	22	VDET
OFTR	16	21	LD OFF
/NRFDET	17	20	VREF
GND	18	19	ENV

2. Block Diagram

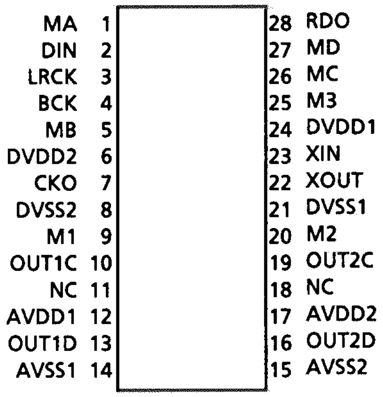

6
7
29
28
27
8
9
10
17
11
12
19
EQ
AGC
RF DET
ENV CURCUIT
BDO
OFTR
VCBA
VCBA
VCBA
VCBA
36
35
31
34
32
33
13
14
15
16
23
24
25
12
2
30
24
25
26
23
22
1
4
3

3. Description

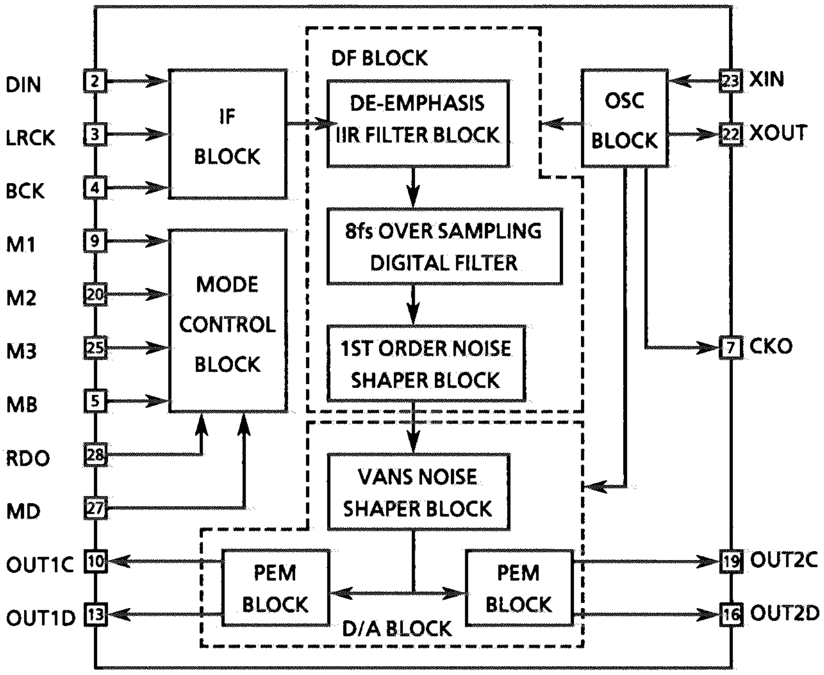
Pin No.	Symbol	I/O	Description
1	PD	I	APC amp input pin
2	LD	O	APC amp input pin
3	LD ON	I	APC ON/OFF control pin
4	LDP	--	Connected to GND
5	VCC	--	Power supply
6	RF-	I	Inverse input pin for RF amp
7	RF OUT	O	RF amp output pin
8	RF IN	I	AGC input pin
9	C.AGC	I/O	Connecting pin of AGC loop filter
10	ARF	O	AGC output pin
11	C.ENV	I/O	A capacitor is connected to this terminal to detect the envelope of RF signal
12	C.EA	I/O	A capacitor is connected to this terminal to detect the envelope of RF signal
13	CS BDO	I/O	A capacitor is connected to detect the lower envelope of the RF signal
14	BDO	O	BDO output pin
15	CS BRT	I/O	A capacitor is connected to detect the lower envelope of the RF signal
16	OFTR	O	Of-track status signal output pin
17	/NRFDET	O	RF detection signal output pin
18	GND	--	GND
19	ENV	O	Envelope output
20	VREF	O	Reference voltage output pin
21	LD OFF	--	Connect to GND
22	VDET	O	Vibration detection signal output pin
23	TE BPF	I	Input pin of tracking error through BPF
24	CROSS	O	Tracking error cross output pin
25	TE OUT	O	Tracking error signal output pin
26	TE-	I	Inverse input pin for tracking error amp
27	FE OUT	O	Output pin of focus error
28	FE-	I	Inverse input pin for focus error amp
29	FBAL	I	Focus balance control pin
30	TBAL	I	Tracking balance control pin
31	PDFR	I/O	E and E I-V amp gain control pin
32	PDER	I/O	F and E I-V amp gain control pin
33	PDF	I	I-V amp input pin
34	PDE	I	I-V amp input pin
35	PD BD	I	I-V amp input pin
36	PD AC	I	I-V amp input pin

■ MN35503 (IC750) : D / A CONVERTER

1. Terminal Layout


MA 1
DIN 2
LRCK 3
BCK 4
MB 5
DVDD2 6
CKO 7
DVSS2 8
M1 9
OUT1C 10
NC 11
AVDD1 12
OUT1D 13
AVSS1 14
28 RDO
27 MD
26 MC
25 M3
24 DVDD1
23 XIN
22 XOUT
21 DVSS1
20 M2
19 OUT2C
18 NC
17 AVDD2
16 OUT2D
15 AVSS2

2. Block Diagram

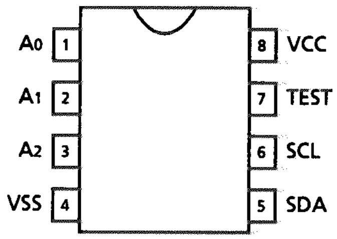

DIN
LRCK
BCK
M1
M2
M3
MB
RDO
MD
OUT1C
OUT1D
2
3
4
9
20
25
5
28
27
10
13
IF BLOCK
MODE CONTROL BLOCK
DF BLOCK
DE-EMPHASIS IIR FILTER BLOCK
8fs OVER SAMPLING DIGITAL FILTER
1ST ORDER NOISE SHAPER BLOCK
VANS NOISE SHAPER BLOCK
PEM BLOCK
PEM BLOCK
D/A BLOCK
OSC BLOCK
23
22
7
19
16
XIN
XOUT
CKO
OUT2C
OUT2D

3.Description

Pin No	Symbol	I/O	Description	Pin No	Symbol	I/O	Description
1	MA	–	Connected to ground	15	AVSS2	–	Analog ground 2
2	DIN	I	Data input	16	OUT2D	O	2D PEM output
3	LRCK	I	LR clock input	17	AVDD2	–	Analog power supply 2
4	BCK	I	Bit clock input	18	NC	–	Non connection
5	MB	I	De-emphasis ON signal	19	OUT2C	O	2C PEM output
6	DVDD2	–	Digital power supply 2	20	M2	–	Connected to ground
7	CKO	I	Clock output	21	DVSS1	–	Digital ground pin 1
8	DVSS2	–	Digital ground 2	22	XOUT	O	Crystal oscillator output
9	M1	–	Connected to ground	23	XIN	I	Crystal oscillator input
10	OUT1C	O	1C PEM output	24	DVDD1	–	Digital power supply 1
11	NC	–	Non connection	25	M3	–	Connected to ground
12	AVDD1	–	Analog power supply 1	26	MC	–	Connected to ground
13	OUT1D	O	1D PEM output	27	MD	I	Reset signal / Digital Att. control signal input
14	AVSS1	–	Analog ground 1	28	RDO	–	Not used

■ AT24C01A-10PC (IC782) : Serial Eeprom

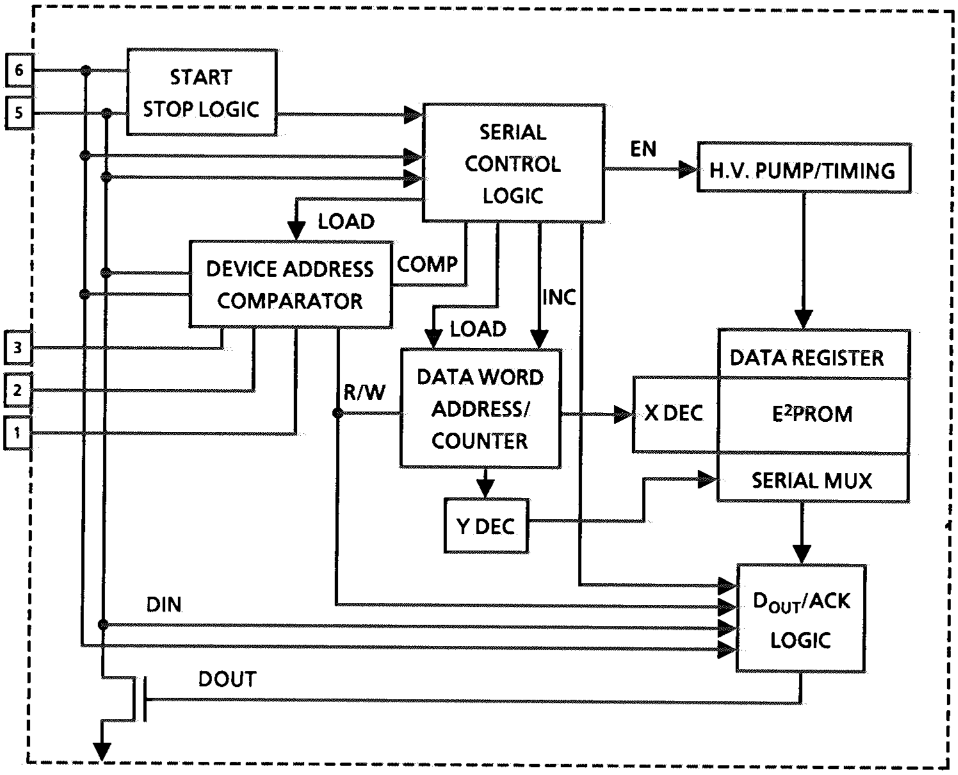
1. Terminal Layout


A0 1
A1 2
A2 3
VSS 4
8 VCC
7 TEST
6 SCL
5 SDA

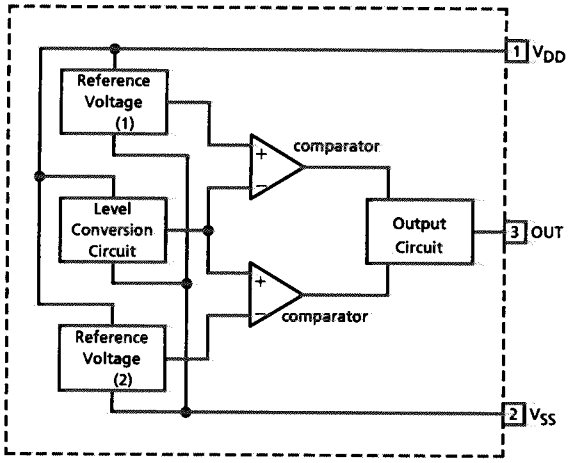
2. Terminal Functions

Pin No.	Symbol	Functions
1~3	$A_0 \sim A_2$	ADDRESS INPUT (NOT USED)
4	VSS	GND
5	SDA	SERIAL DATA
6	SCL	SERIAL CLOCK
7	TEST	TEST PIN (CONNECTED TO GND)
8	VCC	POWER SUPPLY

3. Block Diagram


6
5
START STOP LOGIC
SERIAL CONTROL LOGIC
EN
H.V. PUMP/TIMING
LOAD
DEVICE ADDRESS COMPARATOR
COMP
INC
LOAD
3
2
1
R/W
DATA WORD ADDRESS/ COUNTER
X DEC
DATA REGISTER
E²PROM
SERIAL MUX
Y DEC
DIN
DOUT
D_OUT/ACK LOGIC

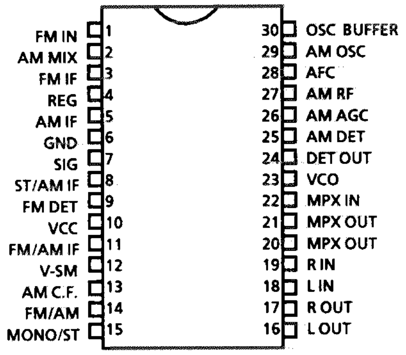
■ MN1281 (P.Q). : IC781 RESET IC


Reference Voltage (1)
Level Conversion Circuit
Reference Voltage (2)
+
−
comparator
+
−
comparator
Output Circuit
1 VDD
3 OUT
2 VSS

Pin No.	Pin Name	Functions
1	V_{DD}	Power supply
2	V_{SS}	Ground
3	OUT	Reset signal output : Low level is output when resetting : High level is output when cancelling the reset.

■ LA1836M (IC102) : FM MPX decorder

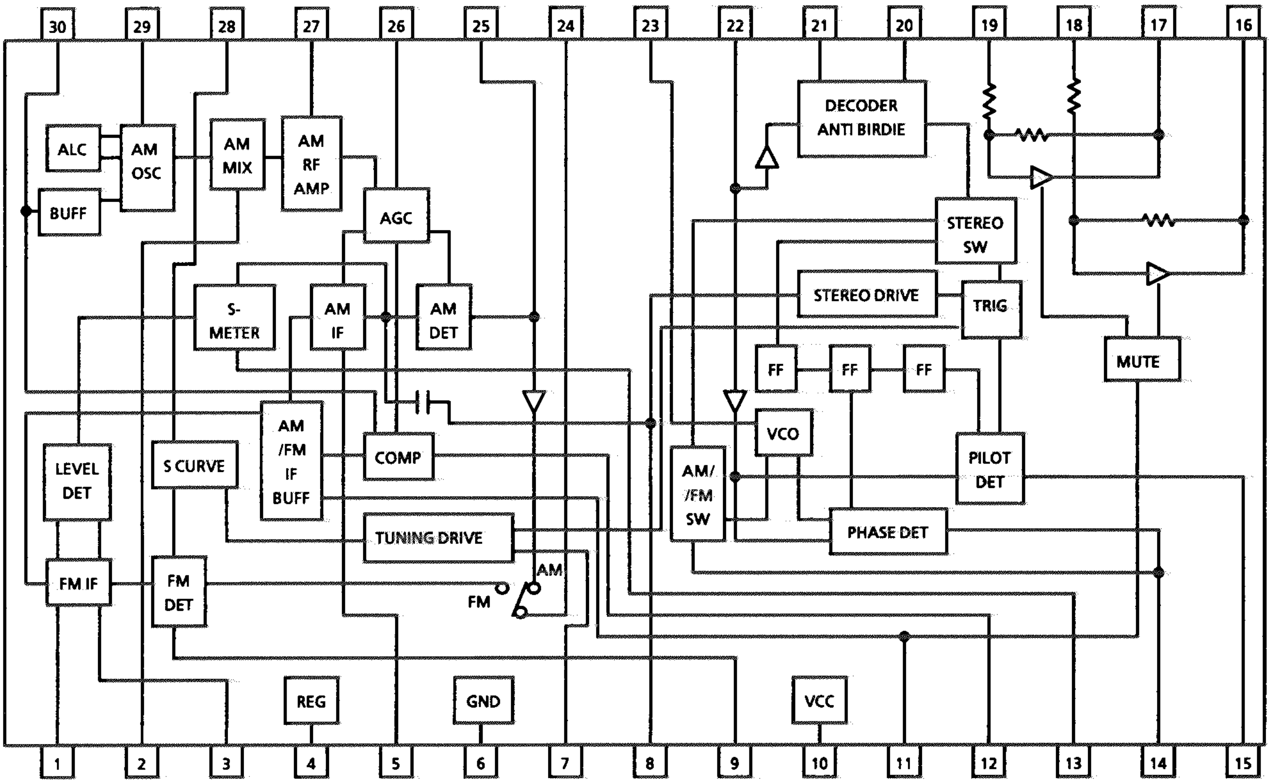
1. Terminal Layout


FM IN 1
AM MIX 2
FM IF 3
REG 4
AM IF 5
GND 6
SIG 7
ST/AM IF 8
FM DET 9
VCC 10
FM/AM IF 11
V-SM 12
AM C.F. 13
FM/AM 14
MONO/ST 15
30 OSC BUFFER
29 AM OSC
28 AFC
27 AM RF
26 AM AGC
25 AM DET
24 DET OUT
23 VCO
22 MPX IN
21 MPX OUT
20 MPX OUT
19 R IN
18 L IN
17 R OUT
16 L OUT

3. Pin Function

Pin No.	Symbol	I/O	Function
1	FM IN	I	This is an input terminal of FM IF Signal.
2	AM MIX	O	This is an output terminal for AM mixer.
3	FM IF	I	Bypass of FM IF
4	REG	—	Register value between pin4 and pin28 desides the frequency width of the input signal.
5	AM IF	I	Input of AM IF Signal.
6	GND	—	This is the device ground terminal.
7	SIG	O	When the set is tunning, this terminal becomes "L".
8	ST/AM IF	O	Stereo indicator output. Stereo : "L", Mono : "H"
9	FM DET	—	FM detect transformer.
10	VCC	—	This is the power supply terminal.
11	FM/AM IF MUTE	O /I	When the signal of IF REQ of IC121(LC7218) appear, the signal of FM/AM IF output.
12	VSM	O	S Meter output and adjust AM SD sensitivity.
13	AM C.F.	O	This is a terminal of AM ceramic filter.
14	FM/AM	I	Change over the FM / AM input. "H" : FM, "L" : AM
15	MONO/ST	O	Stereo : "H", Mono : "L"
16	L OUT	O	Left channel signal output.
17	R OUT	O	Right channel signal output
18	L IN	I	Input terminal of the Left channel post AMP.
19	R IN	I	Input terminal of the Right channel post AMP.
20	MPX L OUT	O	Mpx Left channel signal output.
21	MPX R OUT	O	Mpx Right channel signal output.
22	MPX IN	I	Mpx input terminal.
23	VCO	I	Voltage controlled oscillator terminal.
24	DET OUT	O	AM/FM detection output.
25	AM DET	—	AM low cut adjustment.
26	AM AGC	I	This is an AGC voltage input terminal for AM.
27	AM RF	I	This is an input terminal for AM RF signal.
28	AFC	—	This is an output terminal of voltage for FM-AFC.
29	AM OSC	—	This is a terminal of AM Local oscillation circuit.
30	OSC BUFFER	O	AM Local oscillation Signal output.

2. Block Diagram

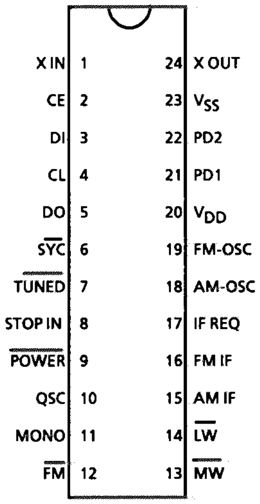

30
29
28
27
26
25
24
23
22
21
20
19
18
17
16
ALC
AM OSC
BUFF
AM MIX
AM RF AMP
AGC
S-METER
AM IF
AM DET
DECODER ANTI BIRDIE
STEREO SW
STEREO DRIVE
TRIG
MUTE
FF
FF
FF
VCO
PILOT DET
AM/ /FM SW
PHASE DET
LEVEL DET
S CURVE
AM /FM IF BUFF
COMP
TUNING DRIVE
AM
FM
FM IF
FM DET
REG
GND
VCC
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

■ LC7218JM (IC121) : PLL Synthesizer

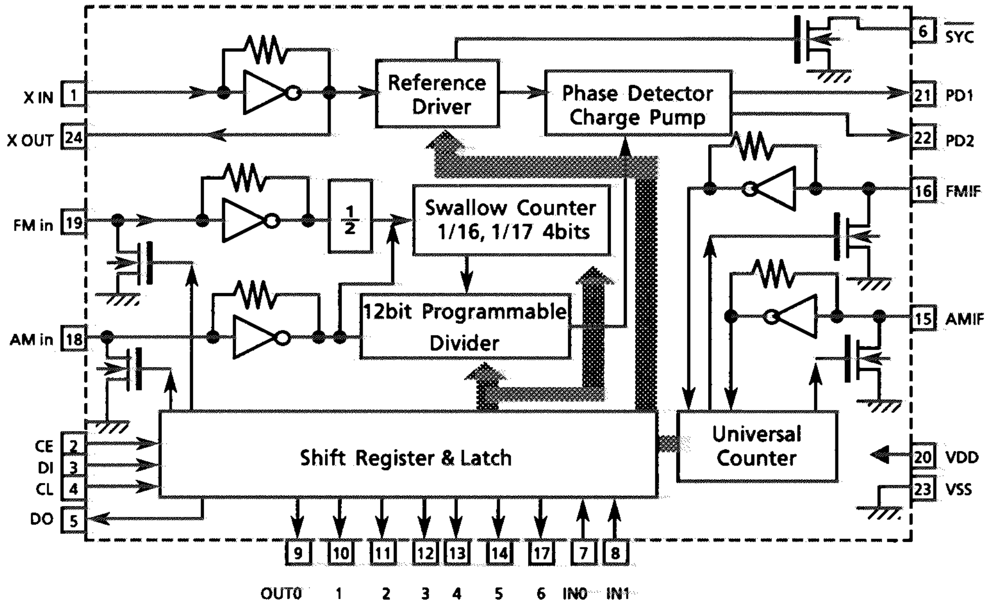
1. The main function descriptions

(1) It makes the local oscillation frequency by the control data from IC901.
(2) Decode the control signal and transmit the signal for receiving conditions.
(3) For the best tuning, count the internal-frequency and transmit the data to IC901.

2. Terminal Layout


X IN 1
CE 2
DI 3
CL 4
DO 5
$\overline{\text{SYC}}$ 6
$\overline{\text{TUNED}}$ 7
STOP IN 8
$\overline{\text{POWER}}$ 9
QSC 10
MONO 11
$\overline{\text{FM}}$ 12
24 X OUT
23 V_{SS}
22 PD2
21 PD1
20 V_{DD}
19 FM-OSC
18 AM-OSC
17 IF REQ
16 FM IF
15 AM IF
14 $\overline{\text{LW}}$
13 $\overline{\text{MW}}$

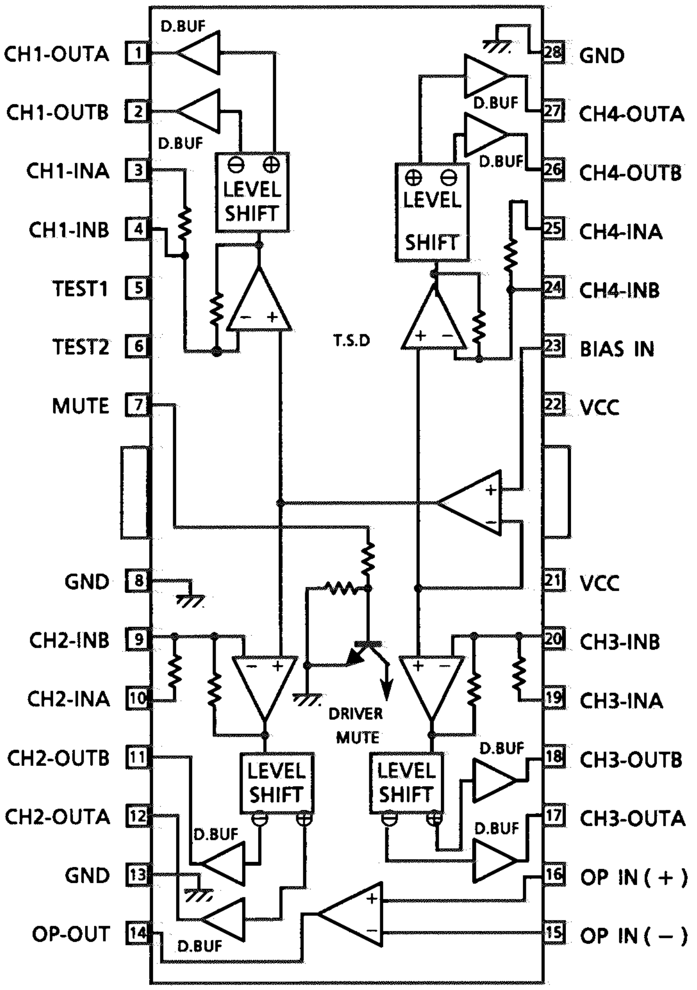
3. Block Diagram


X IN 1
X OUT 24
FM in 19
AM in 18
CE 2
DI 3
CL 4
DO 5
Reference Driver
Phase Detector Charge Pump
1/2
Swallow Counter 1/16, 1/17 4bits
12bit Programmable Divider
Shift Register & Latch
Universal Counter
6 SYC
21 PD1
22 PD2
16 FMIF
15 AMIF
20 VDD
23 VSS
9 10 11 12 13 14 17 7 8
OUTO 1 2 3 4 5 6 INO IN1

4. Pin Functions

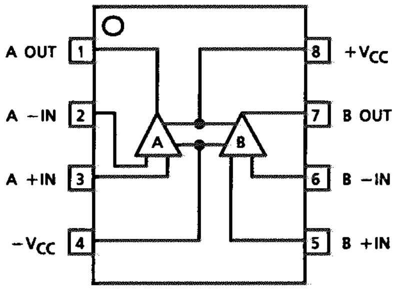
Pin No.	Symbol	I/O	Functions
1,24	X in , X out	I/O	Crystal oscillator (7.2MHz).
2	CE	I	Fix the chip enable to "H" when inputting (DI) and outputting (DO) the serial data.
3	DI	I	Receive the control data from the controller (IC801).
4	CL	I	This clock is used to synchronize data when transmitting the data of DI and DO.
5	DO	O	Transmit the data from LC7218JM to the controller which is synchronized with CL.
6	SYC	—	Not used.
7	TUNED	I	Receive the tuned signal from IC102 (LA1836MA).
8	STOP IN	—	Connected to GND
9	POWER	—	Not used.
10	QSC	—	Not used.
11	MONO	O	It is "H" on FM-monaural, "L" on FM-Stereo.
12	FM	O	It is "L" on FM mode.
13	MW	O	It is "L" on MW mode.
14	LW	O	It is "L" on LW mode.
15	AM-IF	I	Universal counter input for AM-IF from IC102 (LA1836M).
16	FM-IF	I	Universal counter input for FM-IF from IC102(LA1836M).
17	IF REQ	O	Output the "IF-signal request" to IC102 when the pin-7 (tuned in) goes to "H".
18	AM OSC	I	Input the local oscillator signal of AM.
19	FM OSC	I	Input the local oscillator signal of FM.
20	V_{DD}	—	This is a terminal of power supply.
21	PD1	O	PLL charge pump output : When the local oscillator signal frequency is higher than the reference frequency high level signals will output. When it is lower than the reference frequency, low level signals will output. When it is same as reference frequency signals, it will be floating.
22	PD2	—	Not used.
23	Vss	—	Connected to GND

■ BA6398FP(IC700) : 4 CHANNEL DRIVER


CH1-OUTA 1
CH1-OUTB 2
CH1-INA 3
CH1-INB 4
TEST1 5
TEST2 6
MUTE 7
GND 8
CH2-INB 9
CH2-INA 10
CH2-OUTB 11
CH2-OUTA 12
GND 13
OP-OUT 14
28 GND
27 CH4-OUTA
26 CH4-OUTB
25 CH4-INA
24 CH4-INB
23 BIAS IN
22 VCC
21 VCC
20 CH3-INB
19 CH3-INA
18 CH3-OUTB
17 CH3-OUTA
16 OP IN(+)
15 OP IN(−)
D.BUF
LEVEL SHIFT
T.S.D
DRIVER MUTE

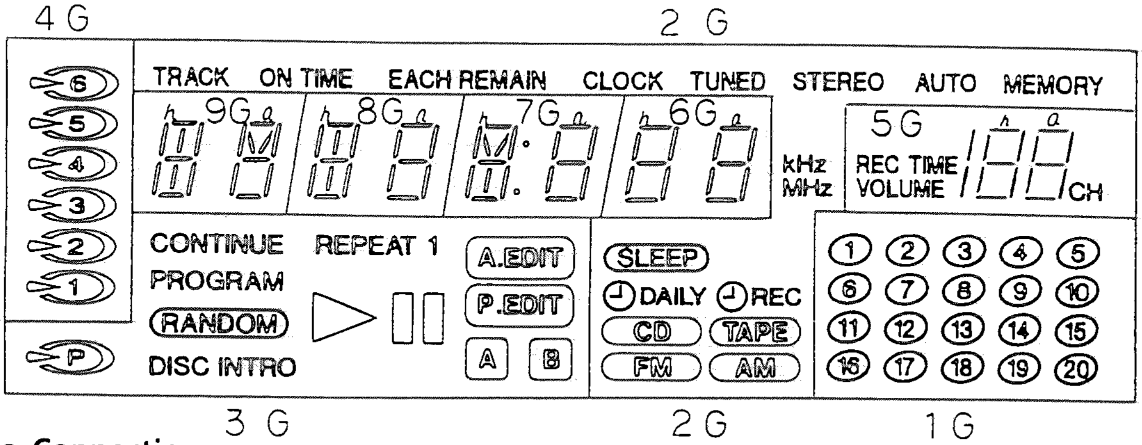
T.S.D : THERMAL SHUT DOWN
D.BUF : DRIVER BUFFER

■ VC4580L(IC720),VC4580D(IC751)
···Dual OP Amp.


A OUT 1
A −IN 2
A +IN 3
$-V_{CC}$ 4
8 $+V_{CC}$
7 B OUT
6 B −IN
5 B +IN
A
B

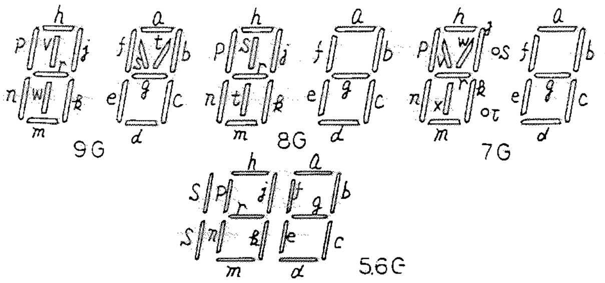
Internal Connections of the FL Display

■ ELU0001-199 : FL790


4 G
2 G
TRACK
ON TIME
EACH REMAIN
CLOCK
TUNED
STEREO
AUTO
MEMORY
9G
8G
7G
6G
5G
kHz
MHz
REC TIME
VOLUME
CH
CONTINUE
REPEAT 1
A.EDIT
PROGRAM
P.EDIT
RANDOM
DISC INTRO
A
B
SLEEP
DAILY
REC
CD
TAPE
FM
AM
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
P
3 G
2 G
1 G

Anode Connection

	1G	2G	3G	4G	5G	6G	7G	8G	9G
S1	①		⊃ (DISC P)		m	m	m	m	m
S2	②		► (DISC P)		s		x		
S3	③	SLEEP	P (DISC P)	1 (DISC 1)	n	n	n	n	n
S4	④	⊕ REC	A.EDIT	⊃ (〃 1)			v	t	w
S5	⑤	⊕ DAILY	P.EDIT	► (〃 1)	k	k	k	k	k
S6	⑥	TAPE	B	2 (〃 2)	r	r	r	r	r
S7	⑦	CD	A	⊃ (〃 2)	p	p	p	p	p
S8	⑧	MHz	1	► (〃 2)	VOLUME		w	s	v
S9	⑨	AM	REPEAT	3 (〃 3)	j	j	j	j	j
S10	⑩	FM	CONTINUE	⊃ (〃 3)	h	h	h	h	h
S11	⑪	KHz	▮▮	► (〃 3)	CH		s		
S12	⑫	TRACK	PROGRAM	4 (〃 4)	d	d	d	d	d
S13	⑬	ON TIME	▶	⊃ (〃 4)	e	e	e	e	e
S14	⑭	EACH	RANDAM	► (〃 4)	c	c	c	c	c
S15	⑮	REMAIN	INTRO	5 (〃 5)	g	g	g	g	g
S16	⑯	CLOCK	DISC	⊃ (〃 5)	f	f	f	f	f
S17	⑰	TUNED		► (〃 5)					s
S18	⑱	STEREO		6 (〃 6)	REC TIME		t		t
S19	⑲	AUTO		⊃ (〃 6)	b	b	b	b	b
S20	⑳	MEMORY		► (〃 6)	a	a	a	a	a


h
a
p
v
r
j
f
s
t
b
n
w
k
e
g
c
m
d
9G
8G
7G
x
o
5.6G

Pin Connection

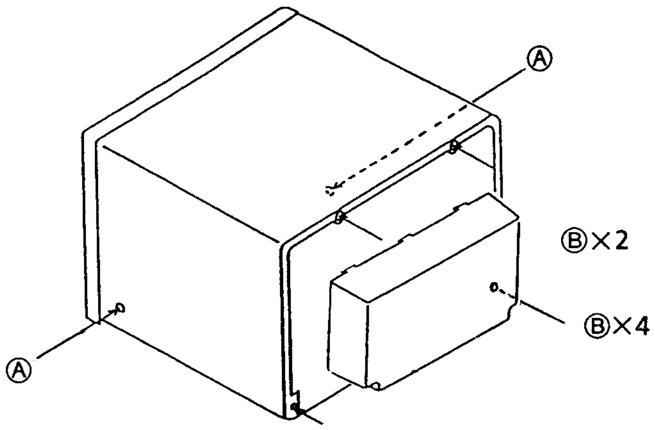
TERMINAL NO.	1	2	3	4	5	6	7	8	9	10	11									
ELECTRODE	F	F	F	NP	NP	P s20	P s19	P s18	P s17	P s16	P s15									
TERMINAL NO.	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
ELECTRODE	P s14	P s13	P s12	P s11	P s10	P s9	P s8	P s7	P s6	P s5	NP	P s4	P s3	P s2	P s1	NC	9G	8G	7G	6G
TERMINAL NO.										32	33	34	35	36	37	38	39	40	41	42
ELECTRODE										5G	4G	3G	2G	1G	NP	NP	NP	F	F	F

Notes F: Filament
G: Grid
P: Anode
NP: No Pin
NC: No Connection

Disassembly Procedures

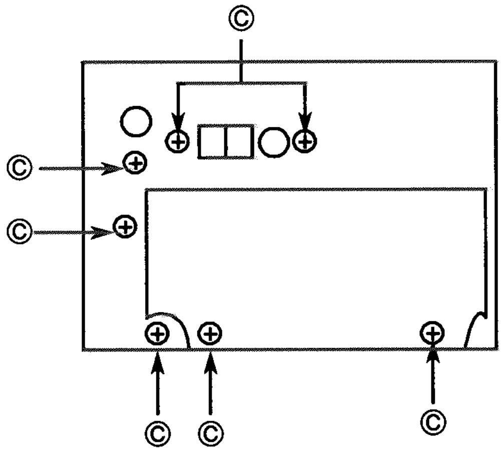
(1) Removing the top cover

1. Remove 2 screws Ⓐ fixing both sides of the top cover, and 4 screws Ⓑ fixing rear sides.
2. Remove the top cover.



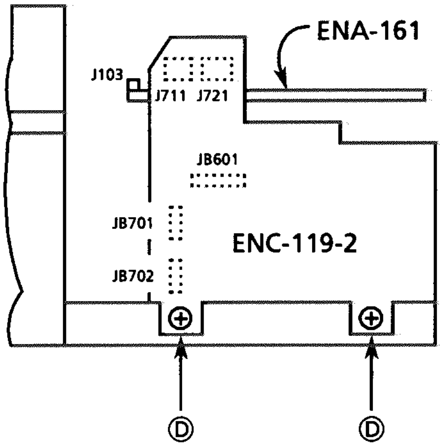
(2) Removing the Rear panel

1. Remove the top cover.
2. Remove 2 screws Ⓒ fixing the changer mech. cover.
3. Remove 5 screws Ⓒ fixing the rear panel.
4. Remove the rear panel.



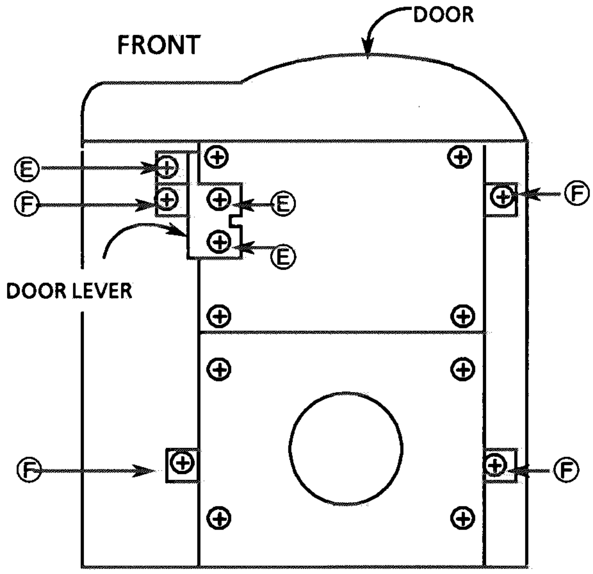
(3) Removing the CD control circuit board (ENC-119-2) and Tuner circuit board (ENA-161)

1. Remove the rear panel.
2. Disconnect the connectors. (J711,J721,JB701,JB702,J103,JB601,J731)
3. Remove 2 screws Ⓓ fixing the CD control circuit board with the tuner circuit board.



(4) Removing the Changer mech. assembly

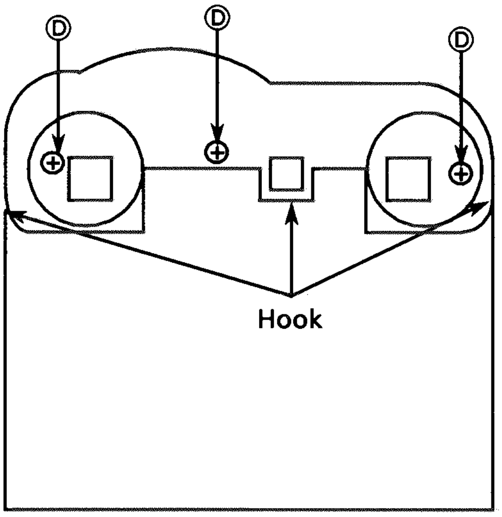
1. Remove the CD control circuit board and tuner circuit board.
2. Remove 3 screws Ⓔ which fix the door lever and open the door halfway to remove the lever.
3. Remove 4 screws Ⓕ which fix the changer mech. assembly and lift its rear side slightly to disassemble the mech. assembly.



ⒶSDSG3006M ⒷGBSG3008CC ⒸE73273-003 ⒹSBSG3008CC ⒺSBSF3008Z ⒻGBSG3008CC

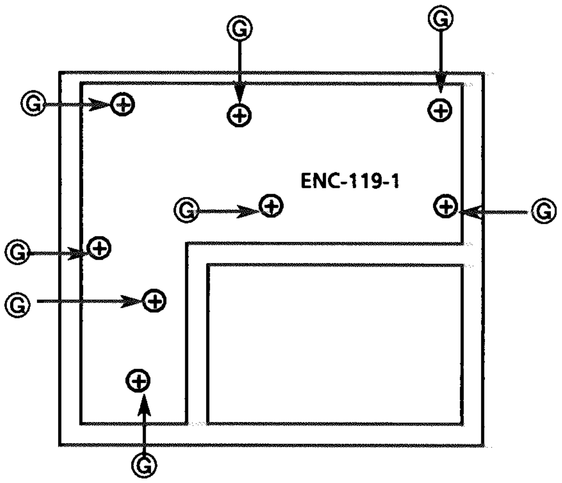
(5) Removing the Front panel assembly

1. Remove 3 screws Ⓔ fixing door lever to remove it. (Refer to Item (4))
2. Remove 3 screws Ⓓ fixing bottom of the front panel assembly.
3. Remove 3 hooks fixing the front panel assembly to remove it.



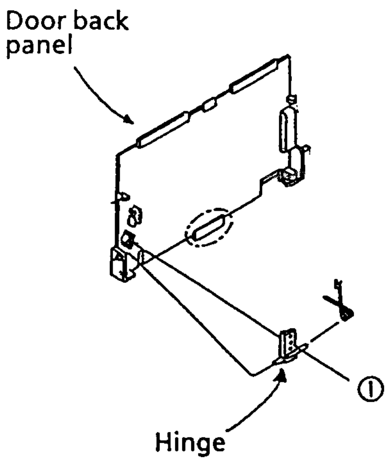
(6) Removing the Front circuit board (ENC-119-1)

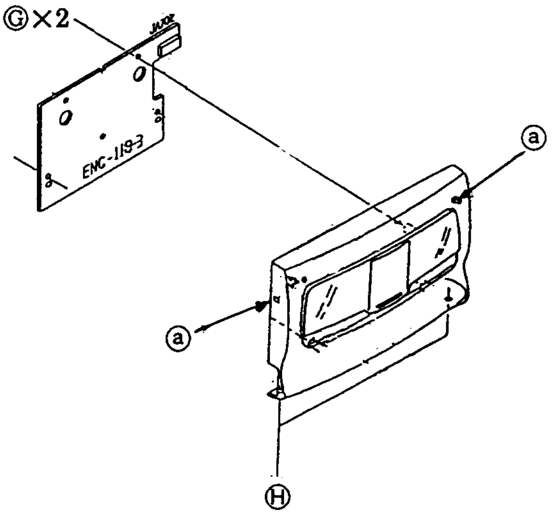
1. Remove the front panel assembly.
2. Remove the 8 screws Ⓖ fixing front circuit board.
3. Remove the front circuit board.



(7) Removing the Front door circuit board (ENC-119-3) and Door back panel

1. Remove the front panel assembly.
2. Remove the 2 screws Ⓗ.
3. Remove the hook by inserting a thin driver from ⓐ hole .
4. Remove a flatwire (JA702) from LED circuit board. which is secured with the door.
5. Remove the 2 screws Ⓖ fixing the front door indicator circuit board.
6. Remove the front door indicator circuit board.
7. Remove the screw Ⓘ fixing the hinge of back panel.
8. Remove the door back panel.





Ⓓ .. SBSG3008CC Ⓖ ... SDSF2608Z Ⓗ ... SSSF2606M Ⓘ ... SDSF2606Z

(8) Removing the CD circuit board (ENN-435)

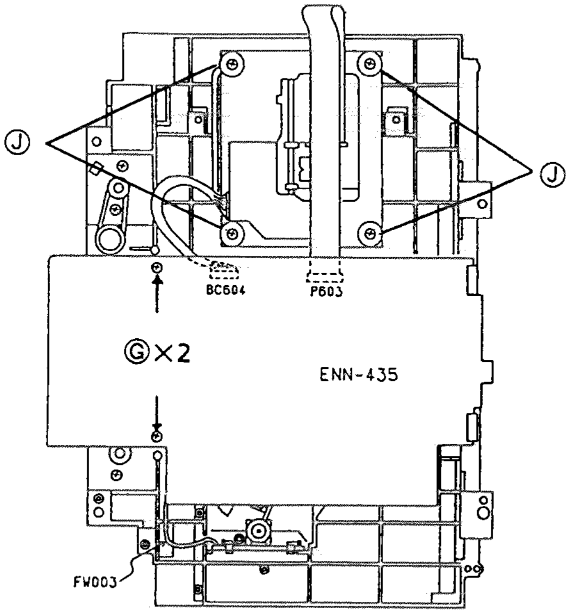
1. Remove the changer mech. assembly.
2. Remove the 2 screws Ⓖ.
3. Disconect the conectors (P603,BC604) to the traverse mech.
4. Remove the CD circuit board (ENN-435).

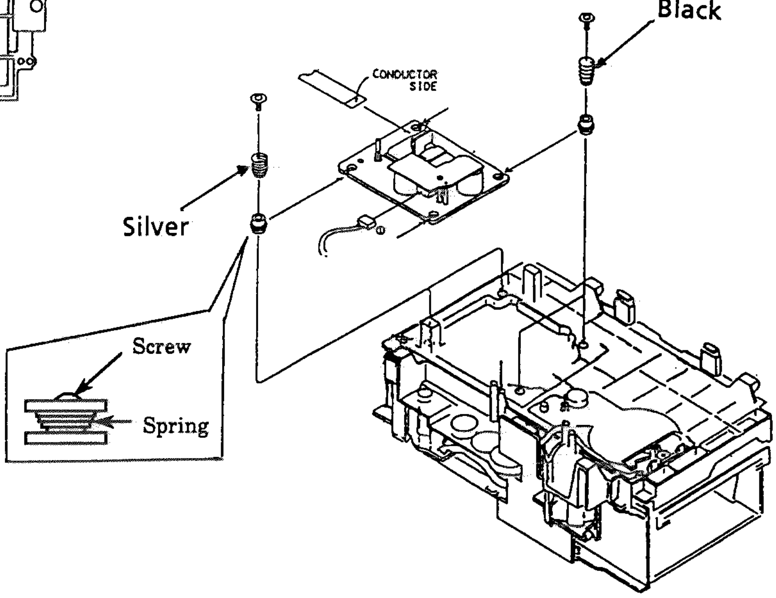
(9) Removing the Traverse mech.

1. Remove the CD mech. assembly.
2. Remove the CD circuit board.
3. Remove the 4 screws Ⓙ.
4. Remove the traverse mech. assembly.

(10) Assembling traverse mech. assembly

1. Put insulators' grooves certainly into cuttings on the traverse mech..
2. Insert springs into the insulators.
3. Secure screws to fix them.


Ⓙ
Ⓙ
BC604
P603
Ⓖ×2
ENN-435
FW003

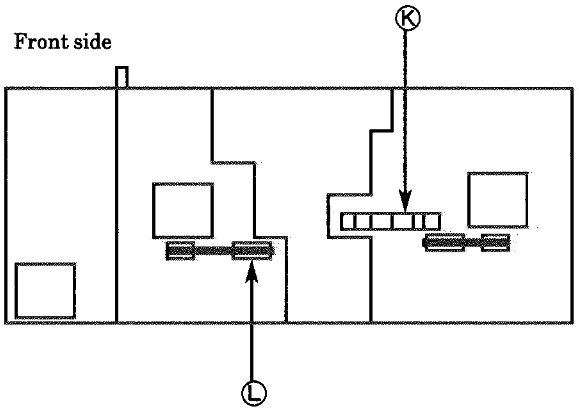

Black
CONDUCTOR SIDE
Silver
Screw
Spring

Ⓖ .. SDSF2608Z Ⓙ ... E408361-001

■ EJECTION OF DISC AND MAGAZINE IN POWER-OFF MODE

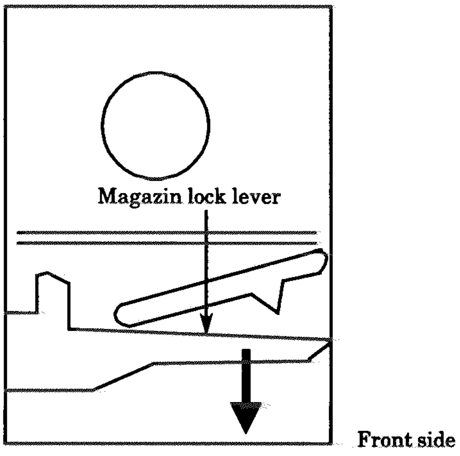
(11) Disc

1. Rotate gear Ⓚ to move the elevator to the disc's position inside the unit.
2. Turn the idler pulley Ⓛ to return the disc on the tray.
3. Lower the elevator to the bottom and rotate pulley Ⓛ to eject the P1 tray.



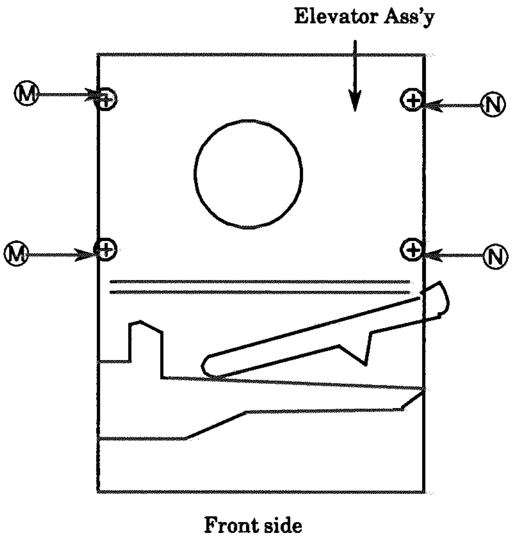
(12) Magazine

1. Return a disc into the magazine. (See the above (11).)
2. Lover the elevator to the bottom.
3. Pull a magazine lock lever which is on the changer mech. toward the front side to release the magazine lock and eject the magazine. (See an arrow in the figure.)



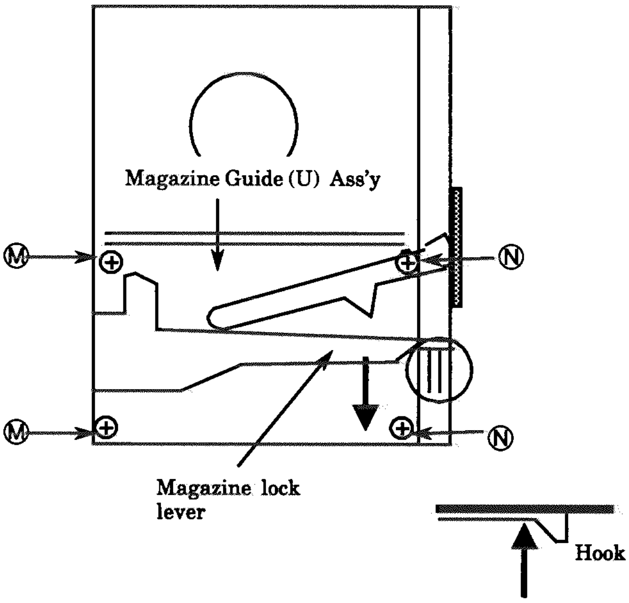
(13) Removing the Elevator assembly

1. Move the elevator assembly up side.
2. Remove the 2 screws Ⓜ and 2 screws Ⓝ.
3. Remove the elevator assembly.


Elevator Ass'y
Ⓜ
Ⓜ
Ⓝ
Ⓝ
Front side

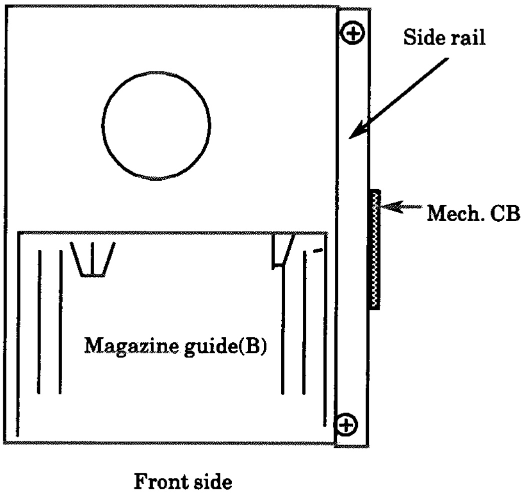
(14) Removing the Magazine guide(U)

1. Remove the 2 screws Ⓜ and 2 screws Ⓝ.
2. Push the hook up and pull the magazine lock lever toward front side to remove the magazine guide(U) from the hook. (See an arrow in the figure.)
3. Remove the magazine guide(U) assembly.


Magazine Guide (U) Ass'y
Ⓜ
Ⓜ
Ⓝ
Ⓝ
Magazine lock lever
Hook

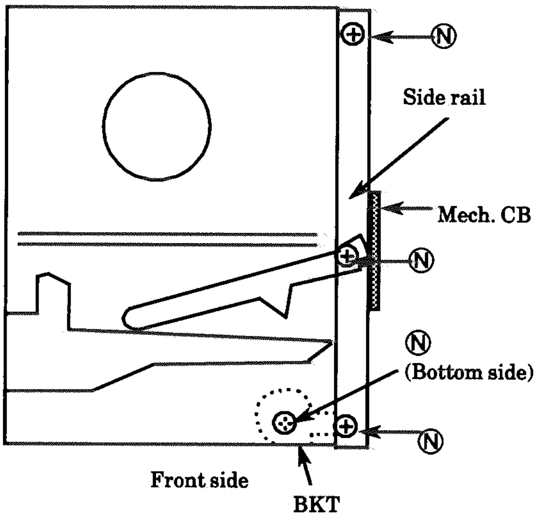
(15) Removing the Magazine guide(B)

1. Remove the magazine guide(U) assembly.
2. Lifting the magazine guide(B) makes it release.


Side rail
Mech. CB
Magazine guide(B)
Front side

(16) Removing the Right side rail

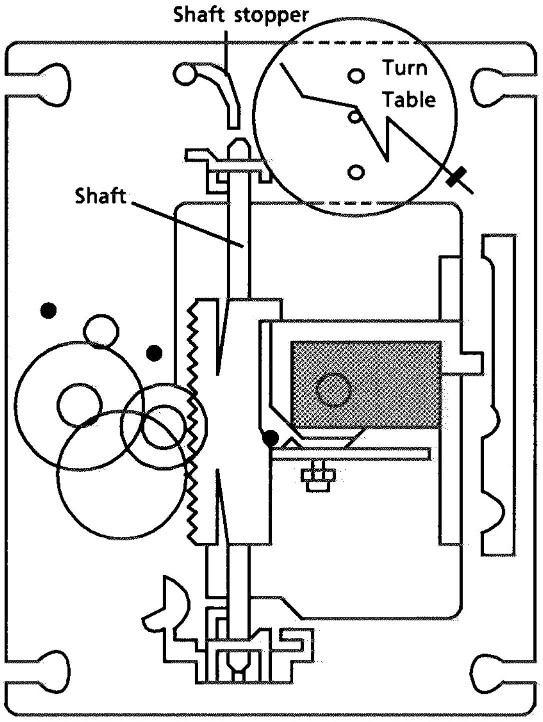
1. Remove the elevator assembly and magazine guide(U) assembly.
2. Rotate gear Ⓚ to move the cam plate to the front side.
3. Remove the mech. circuit board of the side position.
4. Remove the 4 screws Ⓝ holding the side rail and bracket.
5. Remove the side rail.


Ⓝ
Side rail
Mech. CB
Ⓝ
Ⓝ
(Bottom side)
Ⓝ
Front side
BKT

Ⓜ .. SDST2606Z Ⓝ ... SBSF2608Z

(17) Removing the Pickup

1. Remove the CD mech. assembly.
2. Release the shaft to remove the pickup.



(19) Spindle motor installation

1. Tighten the 2 screws to the same torque.
2. Fasten the spindle and feed motor P.C. board with the screw and solder.
3. Install the turntable. When installing, press straight down at the center of the turntable until the distance from the surface of the mech. base to the turntable is exactly 19.4±0.1mm.

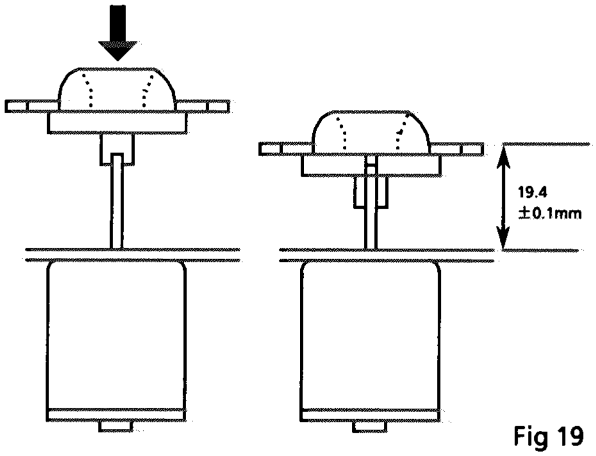
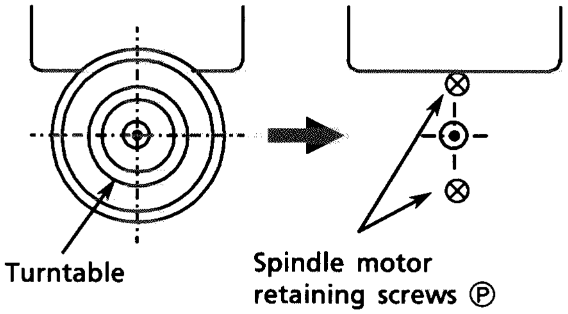


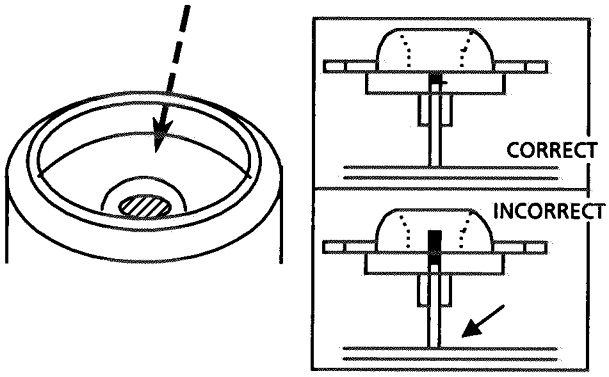
Fig 19

(18) Removing the Spindle motor

1. Remove the CD mech. assembly.
2. Remove the turntable, and remove the two screws retaining the spindle motor.
3. Remove the 2 screws Ⓟ retaining the spindle and feed motor circuit board and unsolder it.



(20) After inserting the turntable, bond the motor shaft and turntable together (at the section marked by an arrow in fig 20 on the left below).



(21) Use "LOCKTITE" #460 bonding agent, and apply as little as possible.

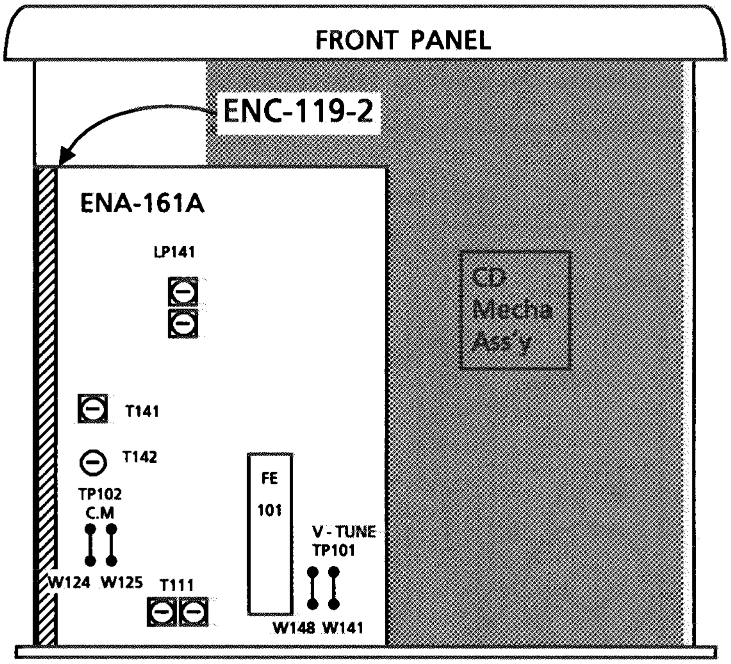
Take care not to allow any excess bonding agent to get onto the turntable.

Be extremely careful not to allow bonding agent to adhere to the motor bearing (the section marked by an allow in fig 20 on the right).

Ⓟ .. SDSP2003N

Adjustment Procedures

■ Tuner section


FRONT PANEL
ENC-119-2
ENA-161A
LP141
T141
T142
TP102
C.M
W124 W125
T111
FE
101
V-TUNE
TP101
W148 W141
CD
Mecha
Ass'y

(1) Tuning voltage

Confirm the voltages in the table below at TP101.

FM Tuning voltage (Unit : V)

Area	Frequency	
	87.5MHz	108MHz
U.S.A., Canada,	1.6±1.0 (V)	8.0±2.0 (V)

AM Tuning voltage (Unit : V)

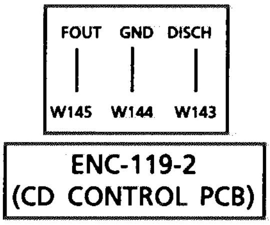
Area	Frequency (MW)	
	531KHz	1710KHz
U.S.A., Canada	1.0> 0.8	8.0> 8.8

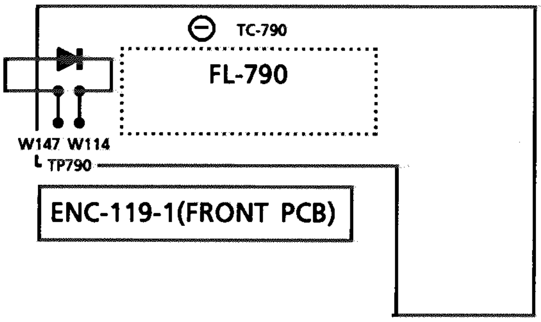
(2) FM center meter

Receive a broadcast by using the function of 'AUTO STOP'.
Adjust T105 (detector coil) so that the voltage at TP102 becomes 0±1.5mV.

(3) Clock Adjustment

1. After putting a diode between W114 and W147 connect ac power cord into ac outlet.
2. Confirm that the display is off and remove the wire.
3. Connect a frequency counter to TP10 (W145).
4. Adjust TC791 so that the frequency becomes 50000.00±0.29Hz.


FOUT
GND
DISCH
W145
W144
W143
ENC-119-2
(CD CONTROL PCB)


TC-790
FL-790
W147 W114
TP790
ENC-119-1(FRONT PCB)

(NOTE) Adjustment is not necessary for CD section.

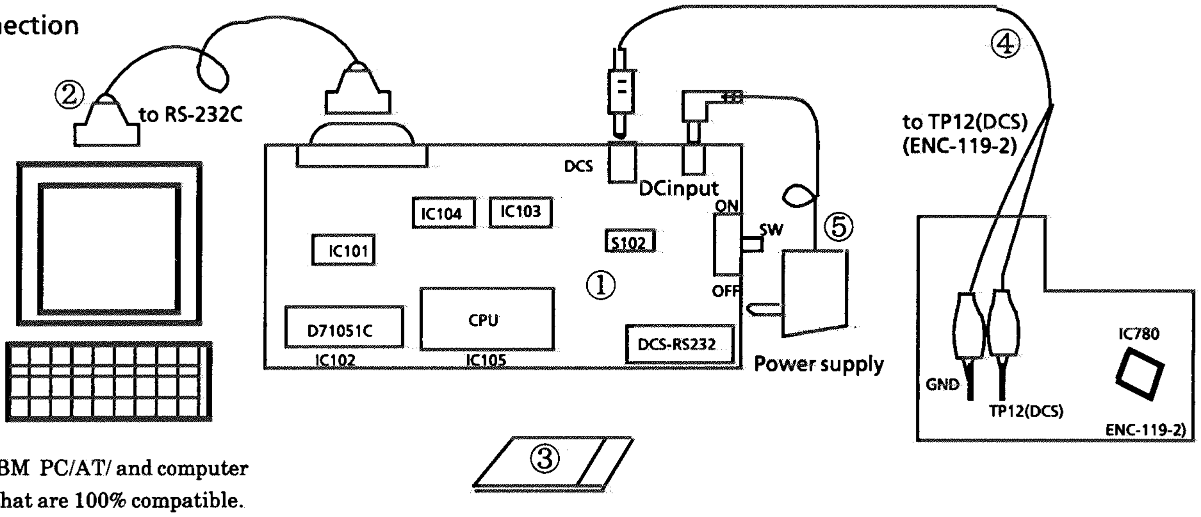
Self-diagnosis for pickup

From DCS output, this model reads automatically adjusted data for CD so that the pickup can be judged defective or not. Following shows its details.

1. Necessary items

① DCS → 232C Converting board(No.EBSJ1019)
② 232C cord (straight)
③ Floppy disc for self-diagnosis (No.EBSJ1021)
④ DCS cord
⑤ Power supply DC 6.3V (AA-SV11J--America/Canada) (AA-SV11Bs--the UK)
(AA-SV11G--Germany) (AA-SV11EF--Continental Europe) (AA-SV11U--the Other aria)
⑥ CD (without scratches or damage)

2. Connection


②
to RS-232C
DCS
DCinput
ON
SW
OFF
IC104
IC103
IC101
S102
①
D71051C
IC102
CPU
IC105
DCS-RS232
⑤
Power supply
④
to TP12(DCS)
(ENC-119-2)
GND
TP12(DCS)
IC780
ENC-119-2
③

IBM PC/AT/ and computer
that are 100% compatible.

For this diagnosis, a device driver for RS232C cord (straght type) is necessary.

(Ex.) C :¥DOS MODE COM 1 : 9600 , N , 8 , 1

adapter number(1or2) band rate parity data bit stop bit

3. Procedure

① Turn the converting board's switch on after connecting between CA-S550 and the above neccesary items
Set S102(switching DCS positive from/to negative logic) so that LED can emit GREEN(positive logic).

② Put a disc on the + 1 tray and press the play button.
Do not

③ Input “AUTO 01” on personal computer's keyboard and the CD's automatic adjustment value and judgment for the pickup are displayed on the screen.

4. Judgment

To judge whether pickup is defective or not, firstly process of automatic adjustment is checked by automatic adjustment flag. And, the value(automatic adjustment value for focus gain) displayed on the screen is used for its final judgment.

It is supposed that the pickup is defective or the signal path is faulty if the Flagl or Flag0 indicates not “F” but a figure.
(See the following example.)

Flagl	Flag0	Details	Supposed cause
0	0	Automatic adjustment for tracking offset is failed.	The automatic adjustment is not completed. (Trouble in circuit.)
0	1	Automatic adjustment for focus offset is failed. (Disc does not rotate.)	The lens does not move. (Power supply is not turned on. Wire is cut.)
0	3	Automatic rough adjustment for focus gain is failed.	
0	7	Automatic rough adjustment for tracking gain is failed. (The focus and tracking gain are not locked though the disc rotates.)	Laser deterioration (low RF signal output). Offset beam.
0	F	Disc rotates, focus and tracking gain are locked and automatic rough adjustment for tracking gain is also completed though automatic adjustment for tracking balance is failed.	Laser deterioration (low RF signal output). Offset beam.
1	F	Automatic adjustment for focus balance is failed. (TOC is not read tough the disc rotates.)	RF signal output is low. Tracking loop is not turned on. RF jitter is too much.
3	F	Automatic rough adjustment for focus gain is failed.	
7	F	Automatic rough adjustment for tracking gain is failed.	
F	F	All automatic adjustments are completed.	

The pickup is judged defective though the Flag0 and Flagl indicate “F” and those adjustments are completed if the adjustment value exceeds 19dB.

Flow of Functional Operation Until TOC is Read

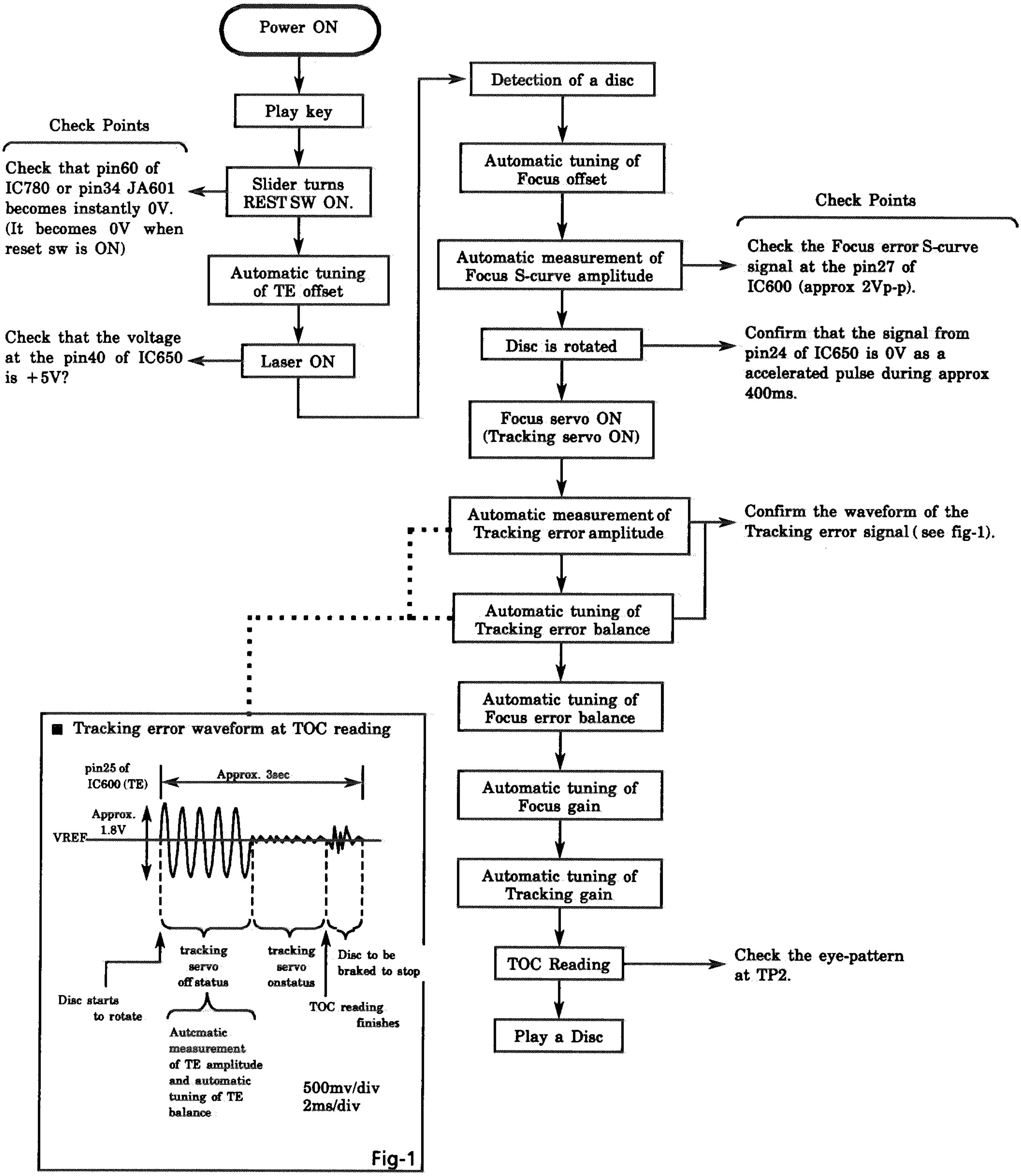

Power ON
Play key
Slider turns REST SW ON.
Automatic tuning of TE offset
Laser ON
Detection of a disc
Automatic tuning of Focus offset
Automatic measurement of Focus S-curve amplitude
Disc is rotated
Focus servo ON (Tracking servo ON)
Automatic measurement of Tracking error amplitude
Automatic tuning of Tracking error balance
Automatic tuning of Focus error balance
Automatic tuning of Focus gain
Automatic tuning of Tracking gain
TOC Reading
Play a Disc
■ Tracking error waveform at TOC reading
pin25 of IC600 (TE)
Approx. 3sec
Approx. 1.8V
VREF
tracking servo off status
tracking servo onstatus
Disc to be braked to stop
Disc starts to rotate
TOC reading finishes
Autcmatic measurement of TE amplitude and automatic tuning of TE balance
500mv/div
2ms/div

Fig-1

Check Points

Check that pin60 of IC780 or pin34 JA601 becomes instantly 0V. (It becomes 0V when reset sw is ON)

Check that the voltage at the pin40 of IC650 is +5V?

Check Points

Check the Focus error S-curve signal at the pin27 of IC600 (approx 2Vp-p).

Confirm that the signal from pin24 of IC650 is 0V as a accelerated pulse during approx 400ms.

Confirm the waveform of the Tracking error signal (see fig-1).

Check the eye-pattern at TP2.

Maintenance of Laser Pickup

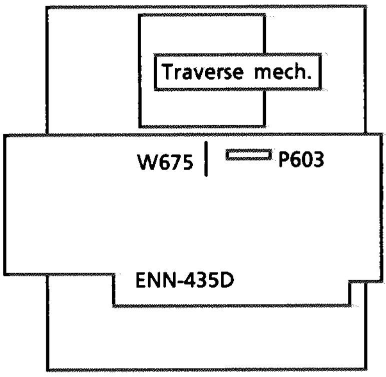
(1) Cleaning the pick up lens
Befor you replace the pick up, please try to clean the lens with a alcohol soaked cotton swab.

(2) Life of the laser diode (Fig.1)
When the life of the laser diode has expired, the following symptoms will appear.

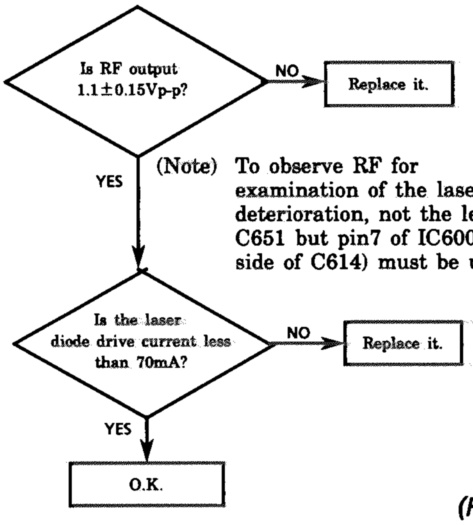
(1) The level of RF output (EFM output: ampli tude of eye pattern) will be low.

(2) The drive current required by the laser diode will be increased. In such a case, check the life of the laser diode following the flowchart below.

(3) Measurement of laser diode drive current (Fig.2)
Cut the jump wire (W675) and add a 1Ω resistor. (See the following Fig,2)
Measure the voltage across the resistor (1Ω) with a milli-voltmeter. When the voltage is more than 70mV, it shows that the life of the laser diode has expired.



(Fig.2)

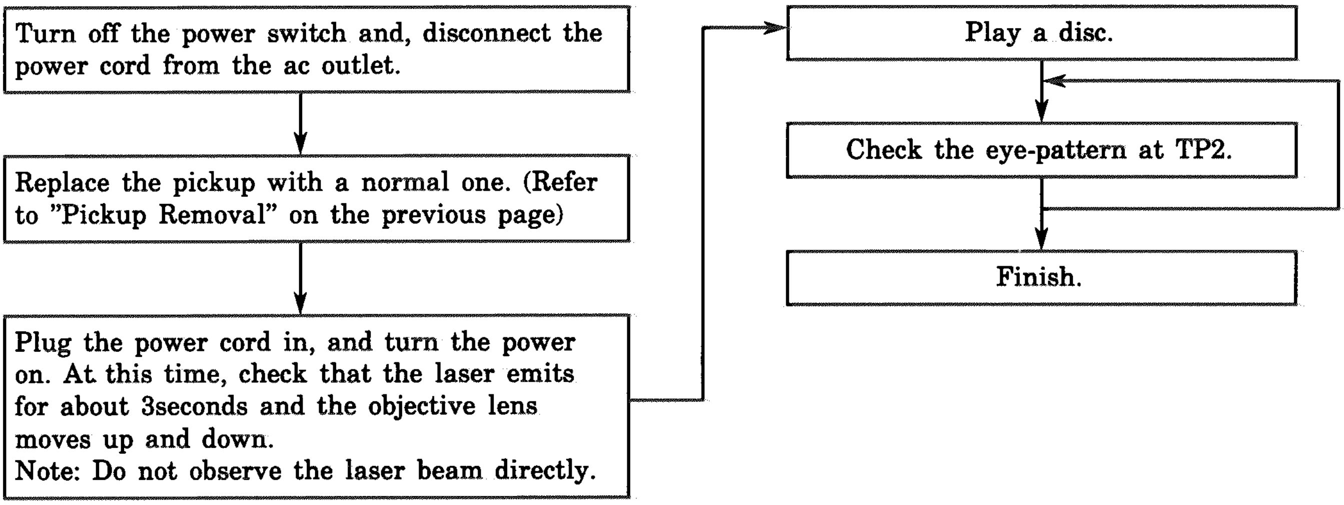

Is RF output 1.1±0.15Vp-p?
NO
Replace it.
YES
Is the laser diode drive current less than 70mA?
NO
Replace it.
YES
O.K.

(Note) To observe RF for examination of the laser deterioration, not the lead of C651 but pin7 of IC600 (one side of C614) must be used.

(Fig.1)

(4) Semi-fixed resistor on the APC PC board
The semi-fixed resistor on the APC printed circuit board which is attached to the pickup is used to adjust the laser power. Since this adjustment should be performed to match the characteristics of the whole optical block, do not touch the semi-fixed resistor.
If the laser power is lower than the specified value, the laser diode is almost worn out, and the laser pickup should be replaced.
If the semi-fixed resistor is adjusted while the pickup is functioning normally, the laser pickup may be damaged due to excessive current.

Replacement of Laser Pickup



Turn off the power switch and, disconnect the power cord from the ac outlet.

Replace the pickup with a normal one. (Refer to "Pickup Removal" on the previous page)

Plug the power cord in, and turn the power on. At this time, check that the laser emits for about 3seconds and the objective lens moves up and down.
Note: Do not observe the laser beam directly.

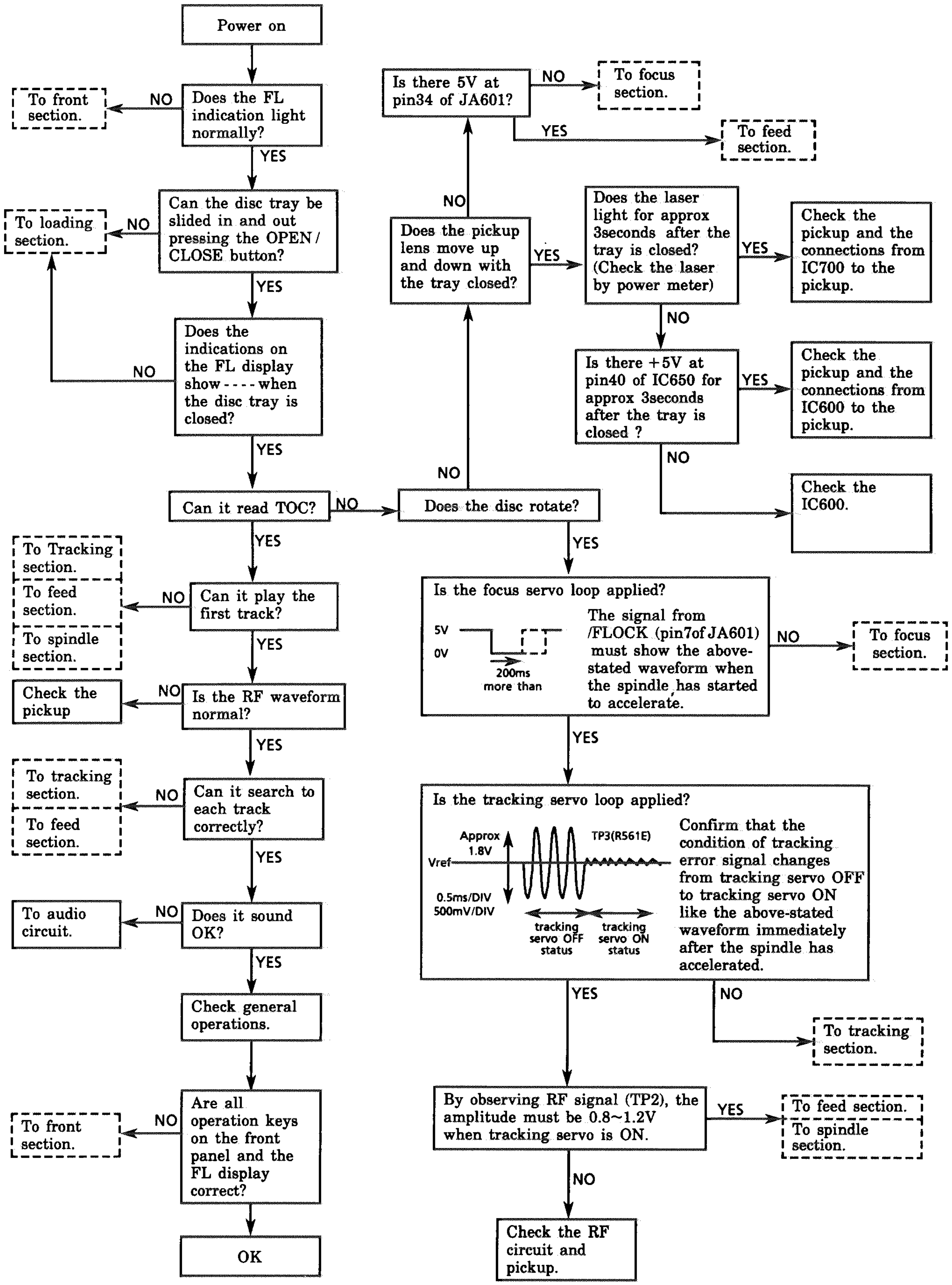
Play a disc.

Check the eye-pattern at TP2.

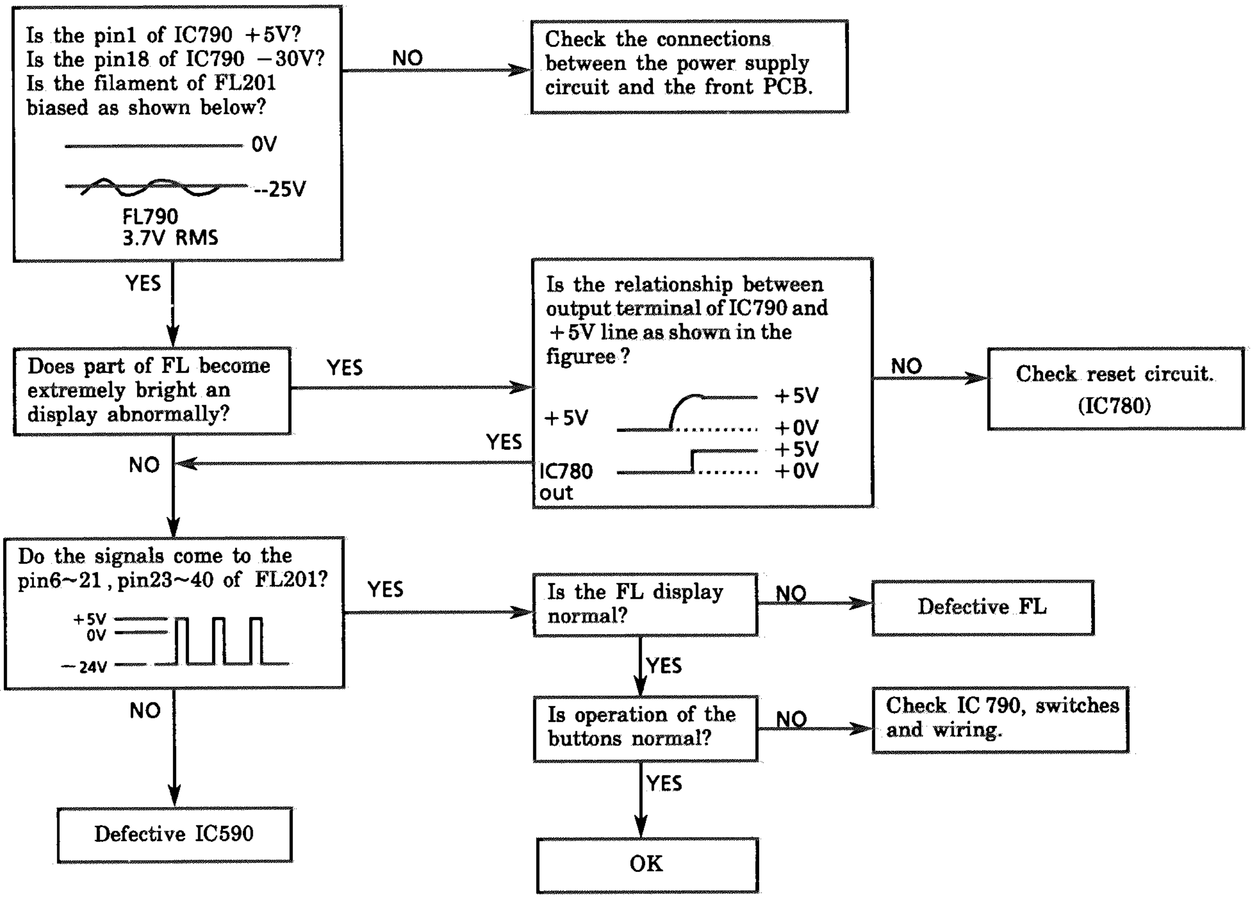
Finish.

Troubleshooting

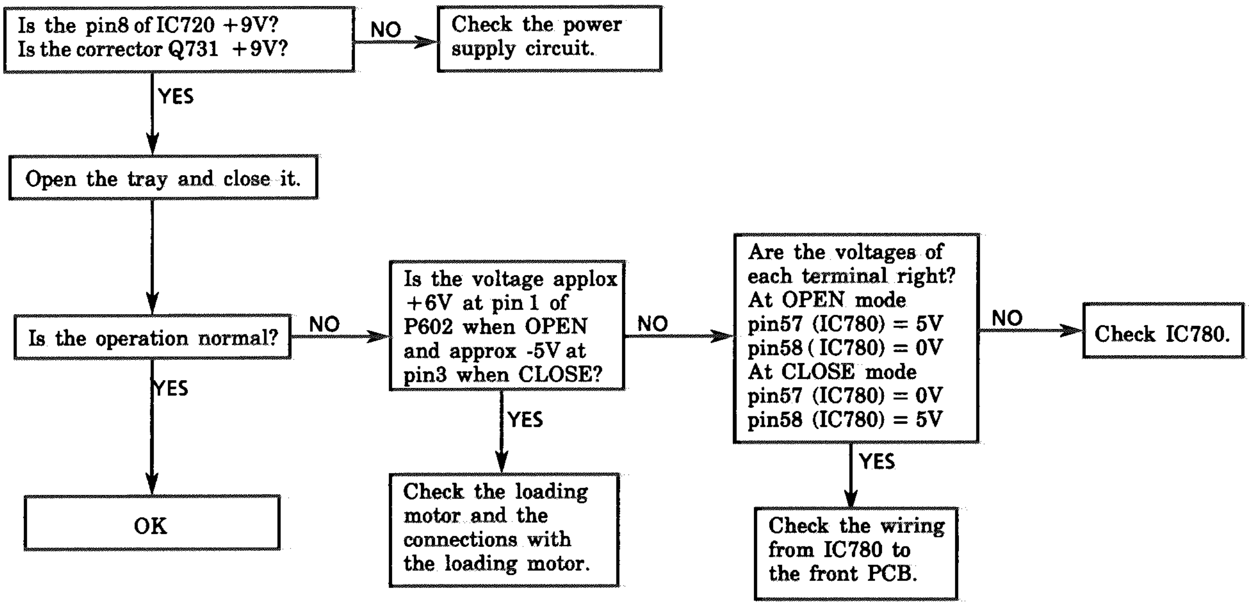
The following shows the status of the various circuits from turning on the power to the start of disc play.


Power on
Does the FL indication light normally?
NO
To front section.
YES
Can the disc tray be slided in and out pressing the OPEN/CLOSE button?
NO
To loading section.
YES
Does the indications on the FL display show - - - - when the disc tray is closed?
NO
YES
Can it read TOC?
NO
Does the disc rotate?
NO
Does the pickup lens move up and down with the tray closed?
NO
Is there 5V at pin34 of JA601?
NO
To focus section.
YES
To feed section.
YES
Does the laser light for approx 3seconds after the tray is closed? (Check the laser by power meter)
YES
Check the pickup and the connections from IC700 to the pickup.
NO
Is there +5V at pin40 of IC650 for approx 3seconds after the tray is closed ?
YES
Check the pickup and the connections from IC600 to the pickup.
NO
Check the IC600.
YES
Is the focus servo loop applied?
5V
0V
200ms more than
The signal from /FLOCK (pin7of JA601) must show the above-stated waveform when the spindle has started to accelerate.
NO
To focus section.
YES
Is the tracking servo loop applied?
Approx 1.8V
Vref
TP3(R561E)
0.5ms/DIV
500mV/DIV
tracking servo OFF status
tracking servo ON status
Confirm that the condition of tracking error signal changes from tracking servo OFF to tracking servo ON like the above-stated waveform immediately after the spindle has accelerated.
NO
To tracking section.
YES
By observing RF signal (TP2), the amplitude must be 0.8~1.2V when tracking servo is ON.
YES
To feed section.
To spindle section.
NO
Check the RF circuit and pickup.
YES
Can it play the first track?
NO
To Tracking section.
To feed section.
To spindle section.
YES
Is the RF waveform normal?
NO
Check the pickup
YES
Can it search to each track correctly?
NO
To tracking section.
To feed section.
YES
Does it sound OK?
NO
To audio circuit.
YES
Check general operations.
Are all operation keys on the front panel and the FL display correct?
NO
To front section.
OK

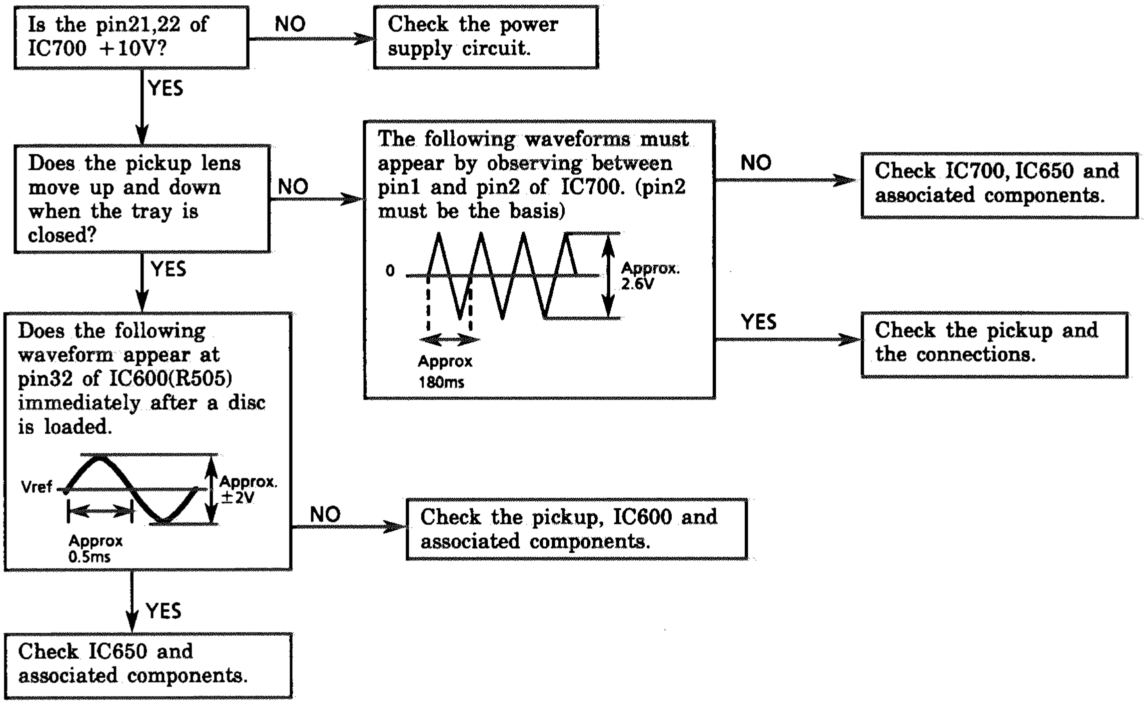
Front Section


Is the pinl of IC790 +5V?
Is the pin18 of IC790 −30V?
Is the filament of FL201 biased as shown below?
0V
--25V
FL790
3.7V RMS
NO
Check the connections between the power supply circuit and the front PCB.
YES
Does part of FL become extremely bright an display abnormally?
YES
Is the relationship between output terminal of IC790 and +5V line as shown in the figuree ?
+5V
+5V
+0V
+5V
+0V
IC780 out
NO
Check reset circuit. (IC780)
YES
NO
Do the signals come to the pin6~21, pin23~40 of FL201?
+5V
0V
−24V
YES
Is the FL display normal?
NO
Defective FL
YES
Is operation of the buttons normal?
NO
Check IC 790, switches and wiring.
YES
OK
NO
Defective IC590

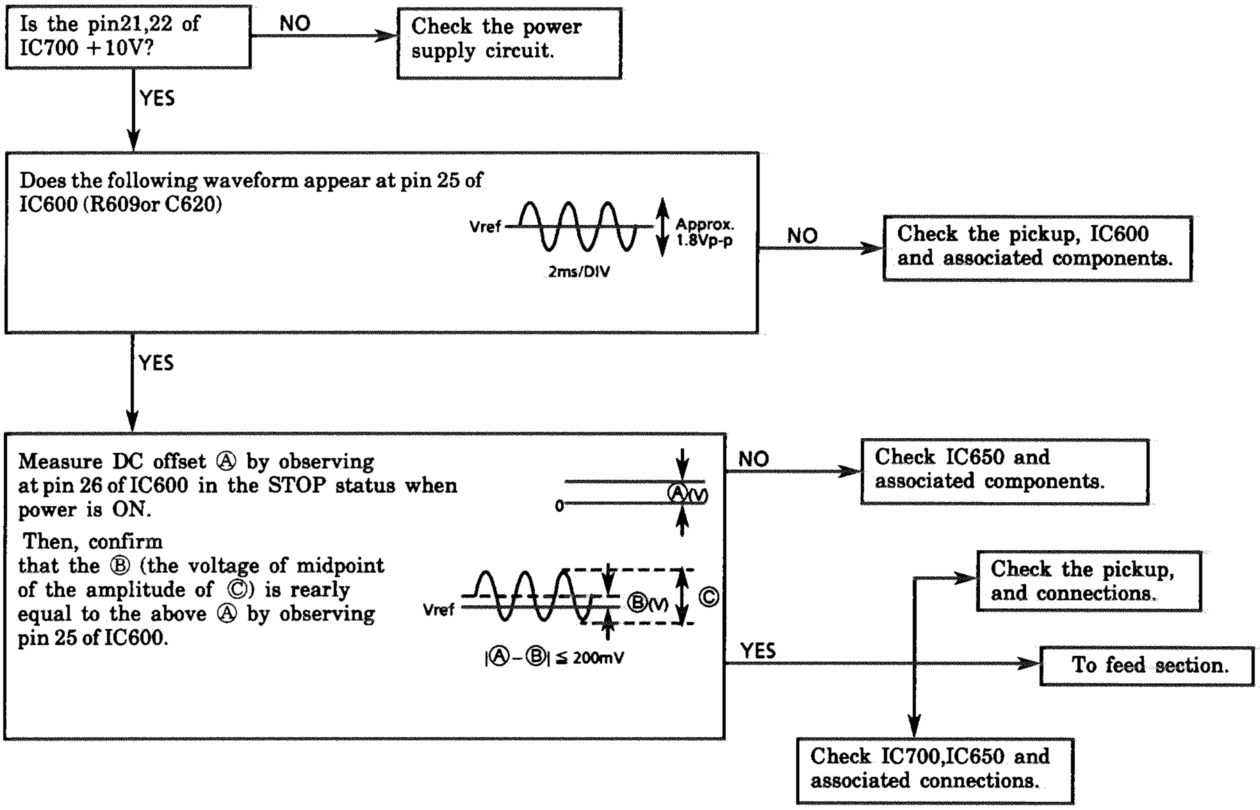
Loading section


Is the pin8 of IC720 +9V?
Is the corrector Q731 +9V?
NO
Check the power supply circuit.
YES
Open the tray and close it.
Is the operation normal?
NO
Is the voltage applox +6V at pin 1 of P602 when OPEN and approx -5V at pin3 when CLOSE?
NO
Are the voltages of each terminal right?
At OPEN mode
pin57 (IC780) = 5V
pin58 (IC780) = 0V
At CLOSE mode
pin57 (IC780) = 0V
pin58 (IC780) = 5V
NO
Check IC780.
YES
Check the wiring from IC780 to the front PCB.
YES
Check the loading motor and the connections with the loading motor.
YES
OK

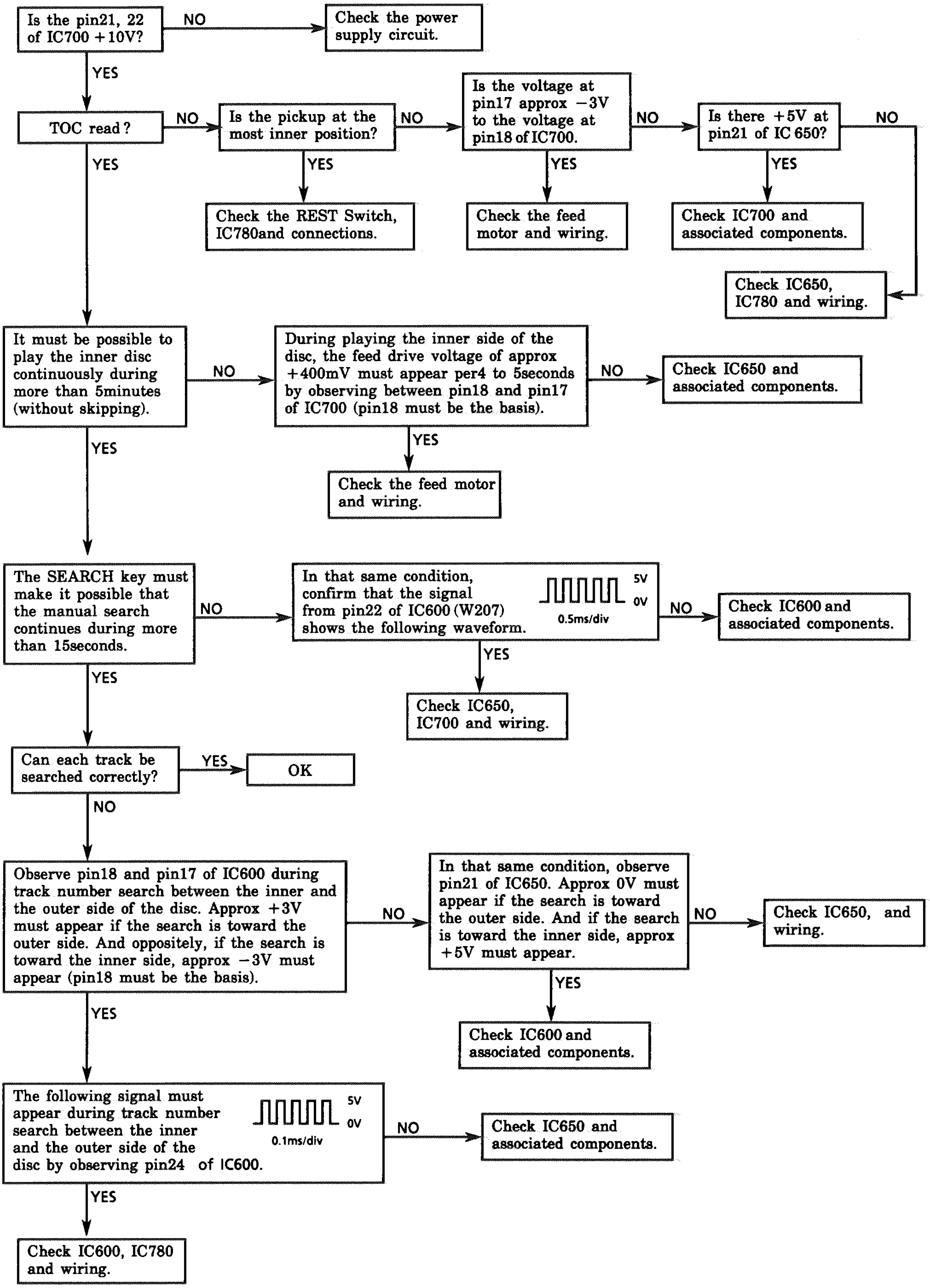
Focus section


Is the pin21,22 of IC700 +10V?
NO
Check the power supply circuit.
YES
Does the pickup lens move up and down when the tray is closed?
NO
The following waveforms must appear by observing between pin1 and pin2 of IC700. (pin2 must be the basis)
0
Approx. 2.6V
Approx 180ms
NO
Check IC700, IC650 and associated components.
YES
Check the pickup and the connections.
YES
Does the following waveform appear at pin32 of IC600(R505) immediately after a disc is loaded.
Vref
Approx. ±2V
Approx 0.5ms
NO
Check the pickup, IC600 and associated components.
YES
Check IC650 and associated components.

Tracking section


Is the pin21,22 of IC700 +10V?
NO
Check the power supply circuit.
YES
Does the following waveform appear at pin 25 of IC600 (R609or C620)
Vref
Approx. 1.8Vp-p
2ms/DIV
NO
Check the pickup, IC600 and associated components.
YES
Measure DC offset Ⓐ by observing at pin 26 of IC600 in the STOP status when power is ON.
0
Ⓐ(V)
Then, confirm that the Ⓑ (the voltage of midpoint of the amplitude of Ⓒ) is rearly equal to the above Ⓐ by observing pin 25 of IC600.
Vref
Ⓑ(V)
Ⓒ
|Ⓐ−Ⓑ| ≤ 200mV
NO
Check IC650 and associated components.
YES
Check the pickup, and connections.
To feed section.
Check IC700,IC650 and associated connections.

Feed section



Is the pin21, 22 of IC700 +10V?

Check the power supply circuit.

TOC read?

Is the pickup at the most inner position?

Check the REST Switch, IC780and connections.

Is the voltage at pin17 approx −3V to the voltage at pin18 of IC700.

Check the feed motor and wiring.

Is there +5V at pin21 of IC 650?

Check IC700 and associated components.

Check IC650, IC780 and wiring.

It must be possible to play the inner disc continuously during more than 5minutes (without skipping).

During playing the inner side of the disc, the feed drive voltage of approx +400mV must appear per4 to 5seconds by observing between pin18 and pin17 of IC700 (pin18 must be the basis).

Check IC650 and associated components.

Check the feed motor and wiring.

The SEARCH key must make it possible that the manual search continues during more than 15seconds.

In that same condition, confirm that the signal from pin22 of IC600 (W207) shows the following waveform.

Check IC600 and associated components.

Check IC650, IC700 and wiring.

Can each track be searched correctly?

OK

Observe pin18 and pin17 of IC600 during track number search between the inner and the outer side of the disc. Approx +3V must appear if the search is toward the outer side. And oppositely, if the search is toward the inner side, approx −3V must appear (pin18 must be the basis).

In that same condition, observe pin21 of IC650. Approx 0V must appear if the search is toward the outer side. And if the search is toward the inner side, approx +5V must appear.

Check IC650, and wiring.

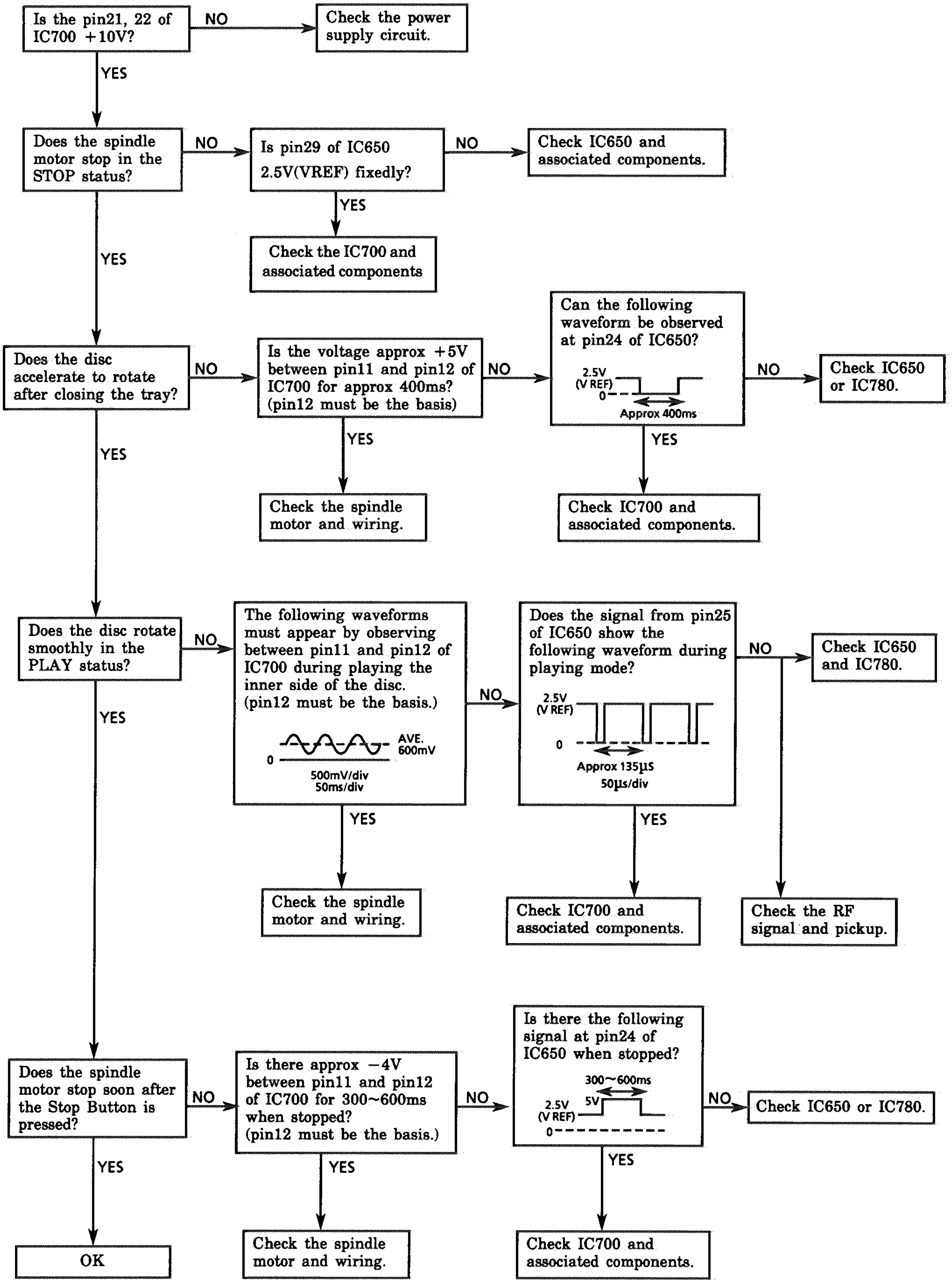
Check IC600 and associated components.

The following signal must appear during track number search between the inner and the outer side of the disc by observing pin24 of IC600.

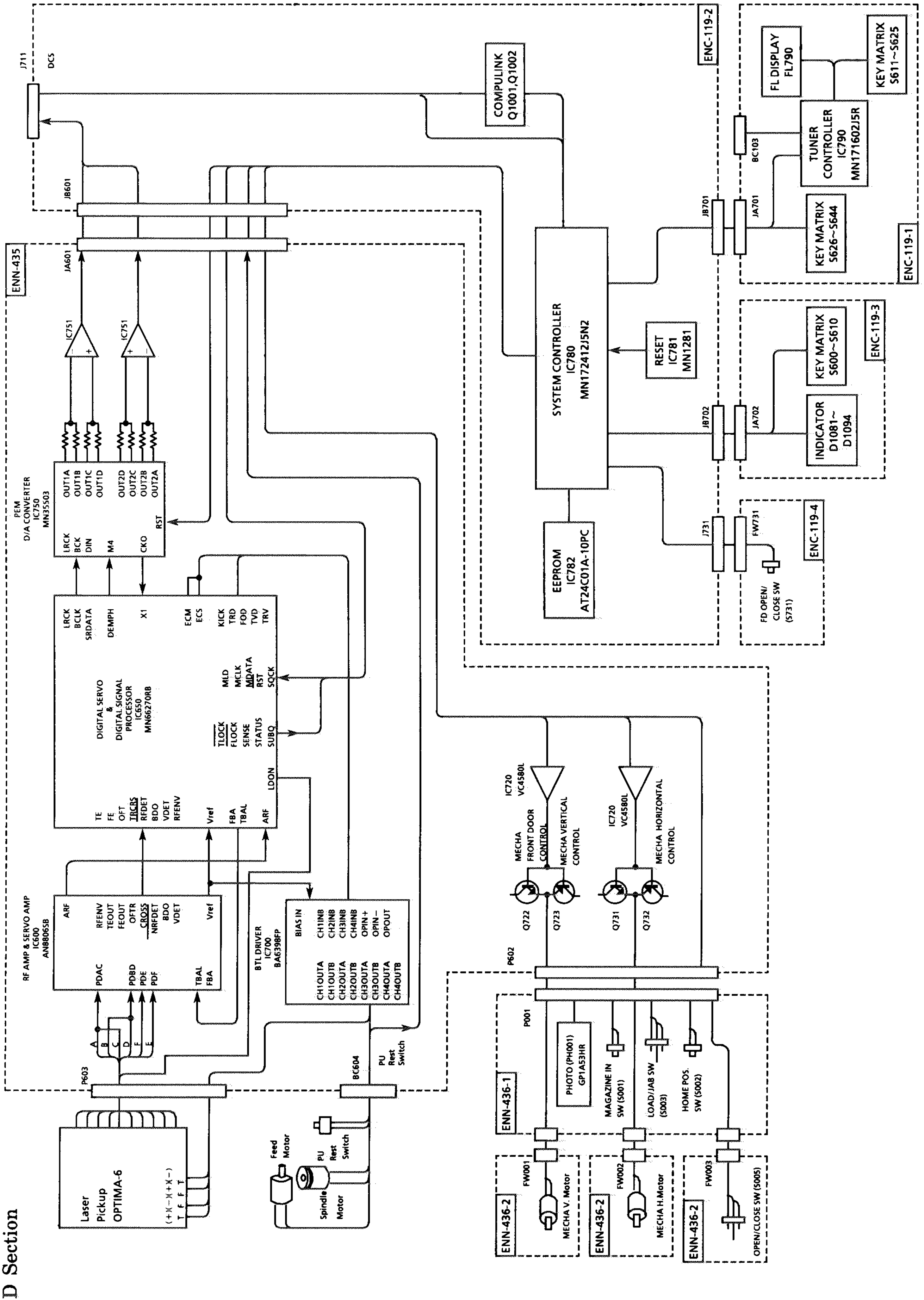
Check IC650 and associated components.

Check IC600, IC780 and wiring.

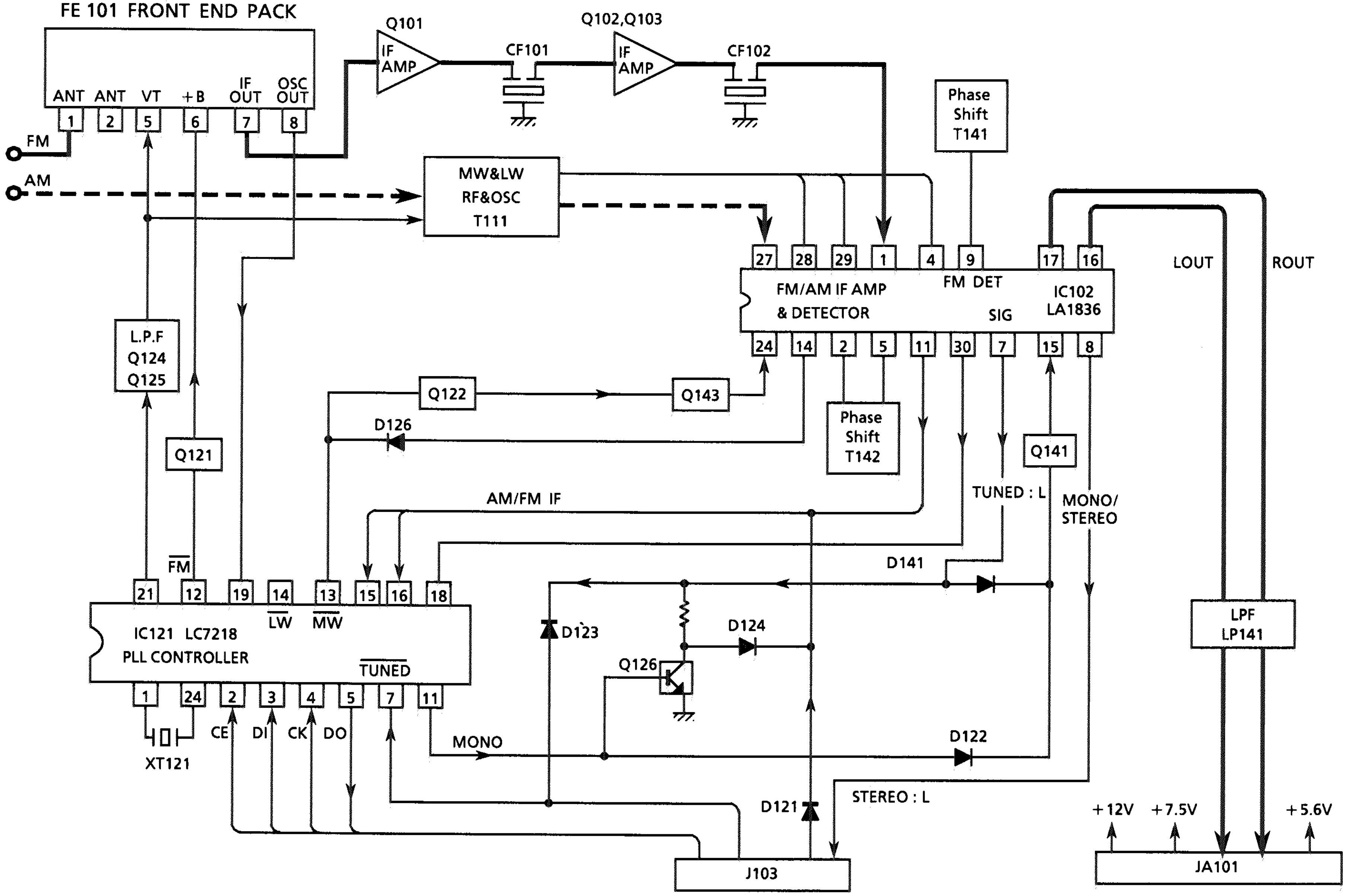
Spindle section


Is the pin21, 22 of IC700 +10V?
NO
Check the power supply circuit.
YES
Does the spindle motor stop in the STOP status?
NO
Is pin29 of IC650 2.5V(VREF) fixedly?
NO
Check IC650 and associated components.
YES
Check the IC700 and associated components
YES
Does the disc accelerate to rotate after closing the tray?
NO
Is the voltage approx +5V between pin11 and pin12 of IC700 for approx 400ms? (pin12 must be the basis)
NO
Can the following waveform be observed at pin24 of IC650?
2.5V (V REF)
0
Approx 400ms
NO
Check IC650 or IC780.
YES
Check the spindle motor and wiring.
YES
Check IC700 and associated components.
YES
Does the disc rotate smoothly in the PLAY status?
NO
The following waveforms must appear by observing between pin11 and pin12 of IC700 during playing the inner side of the disc. (pin12 must be the basis.)
AVE. 600mV
0
500mV/div
50ms/div
NO
Does the signal from pin25 of IC650 show the following waveform during playing mode?
2.5V (V REF)
0
Approx 135µs
50µs/div
NO
Check IC650 and IC780.
YES
Check the spindle motor and wiring.
YES
Check IC700 and associated components.
Check the RF signal and pickup.
YES
Does the spindle motor stop soon after the Stop Button is pressed?
NO
Is there approx −4V between pin11 and pin12 of IC700 for 300~600ms when stopped? (pin12 must be the basis.)
NO
Is there the following signal at pin24 of IC650 when stopped?
300~600ms
2.5V (V REF)
5V
0
NO
Check IC650 or IC780.
YES
OK
YES
Check the spindle motor and wiring.
YES
Check IC700 and associated components.

■ CD Section


J711
DCS
ENC-119-2
COMPULINK Q1001,Q1002
FL DISPLAY FL790
KEY MATRIX S611~S625
BC103
TUNER CONTROLLER IC790 MN171602J5R
JB601
JA601
ENN-435
JB701
JA701
KEY MATRIX S626~S644
ENC-119-1
IC751
SYSTEM CONTROLLER IC780 MN172412J5N2
RESET IC781 MN1281
KEY MATRIX S600~S610
ENC-119-3
JB702
JA702
INDICATOR D1081~D1094
PEM D/A CONVERTER IC750 MN35503
OUT1A
OUT1B
OUT1C
OUT1D
OUT2D
OUT2C
OUT2B
OUT2A
LRCK
BCK
DIN
M4
CKO
RST
EEPROM IC782 AT24C01A-10PC
J731
FW731
ENC-119-4
FD OPEN/CLOSE SW (S731)
LRCK
BCLK
SRDATA
DEMPH
X1
ECM
ECS
KICK
TRD
FOD
TVD
TRV
DIGITAL SERVO & DIGITAL SIGNAL PROCESSOR IC650 MN66270RB
MLD
MCLK
MDATA
RST
SQCK
TLOCK
FLOCK
SENSE
STATUS
SUBQ
TE
FE
OFT
TRCRS
RFDET
BDO
VDET
RFENV
Vref
FBA
TBAL
ARF
LDON
IC720 VC4580L
MECHA FRONT DOOR CONTROL
MECHA VERTICAL CONTROL
IC720 VC4580L
MECHA HORIZONTAL CONTROL
RF AMP & SERVO AMP IC600 AN8806SB
ARF
RFENV
TEOUT
FEOUT
OFTR
CROSS
NRFDET
BDO
VDET
Vref
PDAC
PDBD
PDE
PDF
TBAL
FBA
BTL DRIVER IC700 BA6398FP
BIAS IN
CH1INB
CH2INB
CH3INB
CH4INB
OPIN+
OPIN−
OPOUT
CH1OUTA
CH1OUTB
CH2OUTA
CH2OUTB
CH3OUTA
CH3OUTB
CH4OUTA
CH4OUTB
Q722
Q723
Q731
Q732
P602
P001
A
B
C
D
F
E
P603
BC604
PU Rest Switch
PHOTO (PH001) GP1A53HR
MAGAZINE IN SW (S001)
LOAD/JAB SW (S003)
HOME POS. SW (S002)
ENN-436-1
Laser Pickup OPTIMA-6
(+)(−)(+)(−)
T F F T
Feed Motor
PU Rest Switch
Spindle Motor
FW001
ENN-436-2
MECHA V. Motor
FW002
ENN-436-2
MECHA H.Motor
FW003
ENN-436-2
OPEN/CLOSE SW (S005)

Tuner Section

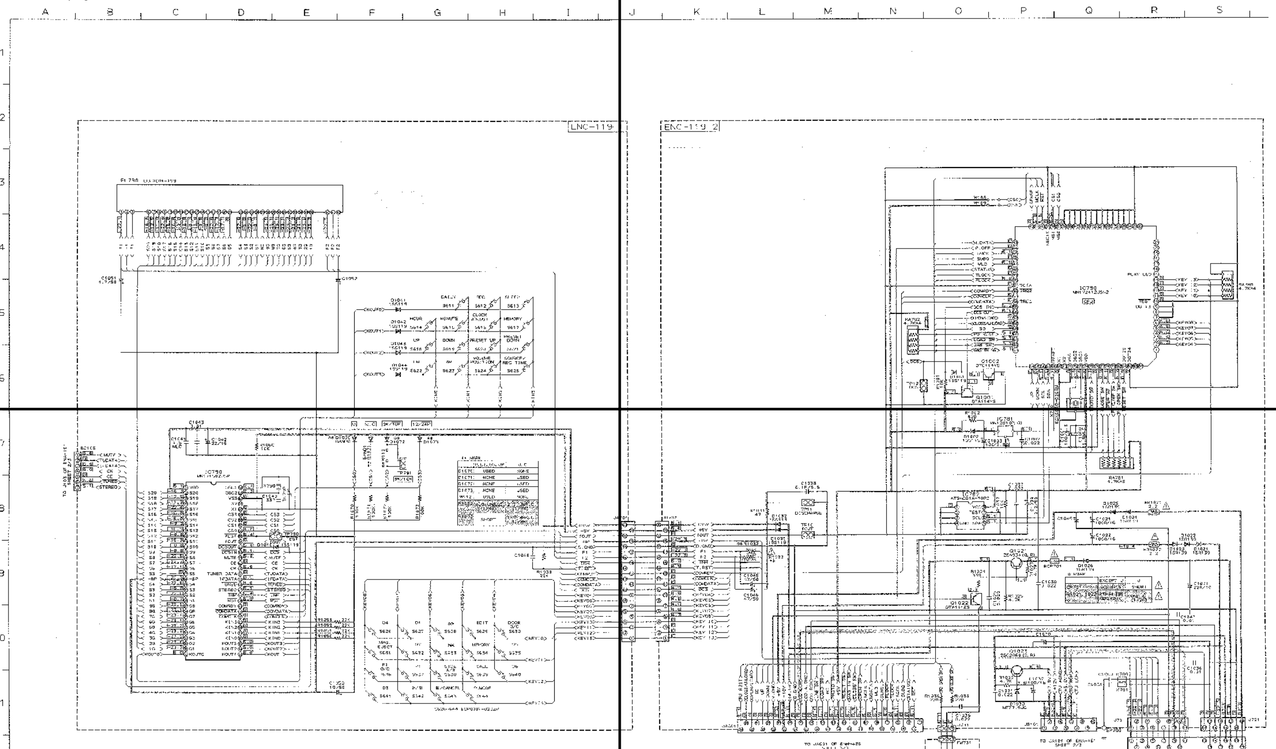

FE 101 FRONT END PACK
ANT
ANT
VT
+B
IF OUT
OSC OUT
1
2
5
6
7
8
FM
AM
Q101
IF AMP
CF101
Q102,Q103
IF AMP
CF102
MW&LW RF&OSC T111
Phase Shift T141
27
28
29
1
4
9
17
16
FM/AM IF AMP & DETECTOR
FM DET
SIG
IC102 LA1836
24
14
2
5
11
30
7
15
8
LOUT
ROUT
L.P.F Q124 Q125
Q121
Q122
Q143
D126
Phase Shift T142
Q141
TUNED : L
MONO/ STEREO
AM/FM IF
D141
FM
21
12
19
14
13
15
16
18
LW
MW
IC121 LC7218
PLL CONTROLLER
TUNED
1
24
2
3
4
5
7
11
XT121
CE
DI
CK
DO
MONO
D123
D124
Q126
D122
D121
STEREO : L
J103
LPF LP141
+12V
+7.5V
+5.6V
JA101

P3-33-b

P3-33-d

Schematic Diagrams

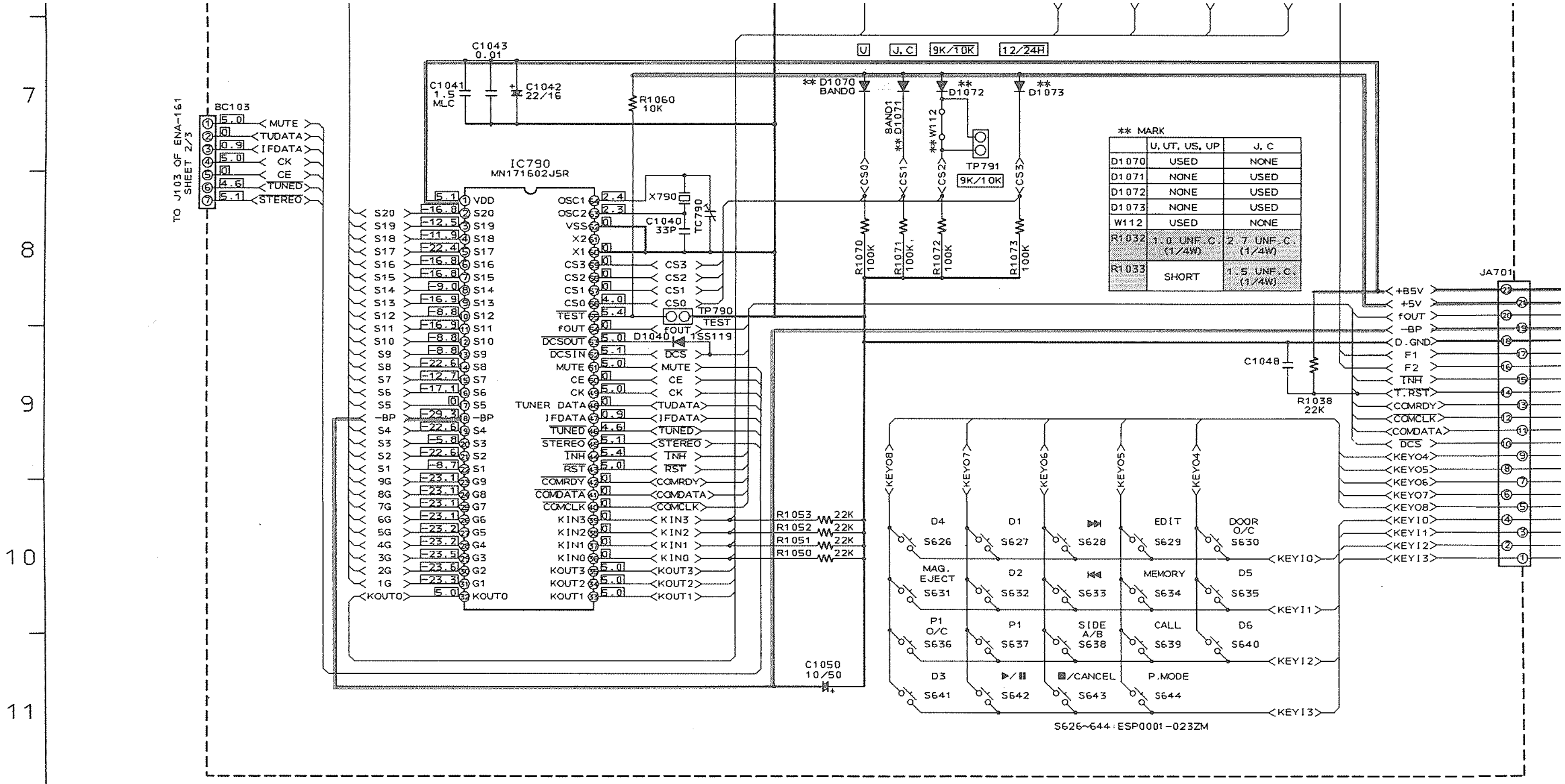
▩ FL Display & Tuner Controller Section


A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
Q
R
S
1
2
3
4
5
6
7
8
9
10
11
12
13
LNC-119
ENC-119 2
ENC-119 4

Notes:
1. —— indicates +B power supply.
2. - - - indicates −B power supply.
3. ▨ indicates Main signal path.
4. When replacing the parts in the shaded area (▨) and those marked with ⚠, be sure to use the designated parts to ensure safety.
5. This is the standard circuit diagram.
The design and contents are subject to change without notice.

P3-33-a

P3-33-c


7
8
9
10
11
12
13
TO J103 OF ENA-161 SHEET 2/3
BC103
MUTE
TUDATA
IFDATA
CK
CE
TUNED
STEREO
IC790
MN171602JSR
C1043 0.01
C1041 1.5 MLC
C1042 22/16
R1060 10K
X790
C1040 33P
TC790
TP790
TEST
D1040 1SS119
fOUT
VDD
OSC1
OSC2
VSS
X1
X2
CS0
CS1
CS2
CS3
DCSOUT
DCSIN
DCS
MUTE
TUNER DATA
COMRDY
COMDATA
COMCLK
KIN0
KIN1
KIN2
KIN3
KOUT0
KOUT1
KOUT2
KOUT3
R1050 22K
R1051 22K
R1052 22K
R1053 22K
C1050 10/50
** D1070 BAND0
BAND1 ** D1071
** D1072
** D1073
** W112
TP791 9K/10K
R1070 100K
R1071 100K
R1072 100K
R1073 100K
U
J.C
9K/10K
12/24H
C1048
R1038 22K
JA701
+B5V
+5V
fOUT
-BP
D.GND
F1
F2
INH
T.RST
KEY04
KEY05
KEY06
KEY07
KEY08
KEY10
KEY11
KEY12
KEY13
D4 S626
D1 S627
S628
EDIT S629
DOOR O/C S630
MAG. EJECT S631
D2 S632
S633
MEMORY S634
D5 S635
P1 O/C S636
P1 S637
SIDE A/B S638
CALL S639
D6 S640
D3 S641
▶/❚❚ S642
■/CANCEL S643
P.MODE S644
S626~644:ESP0001-023ZM

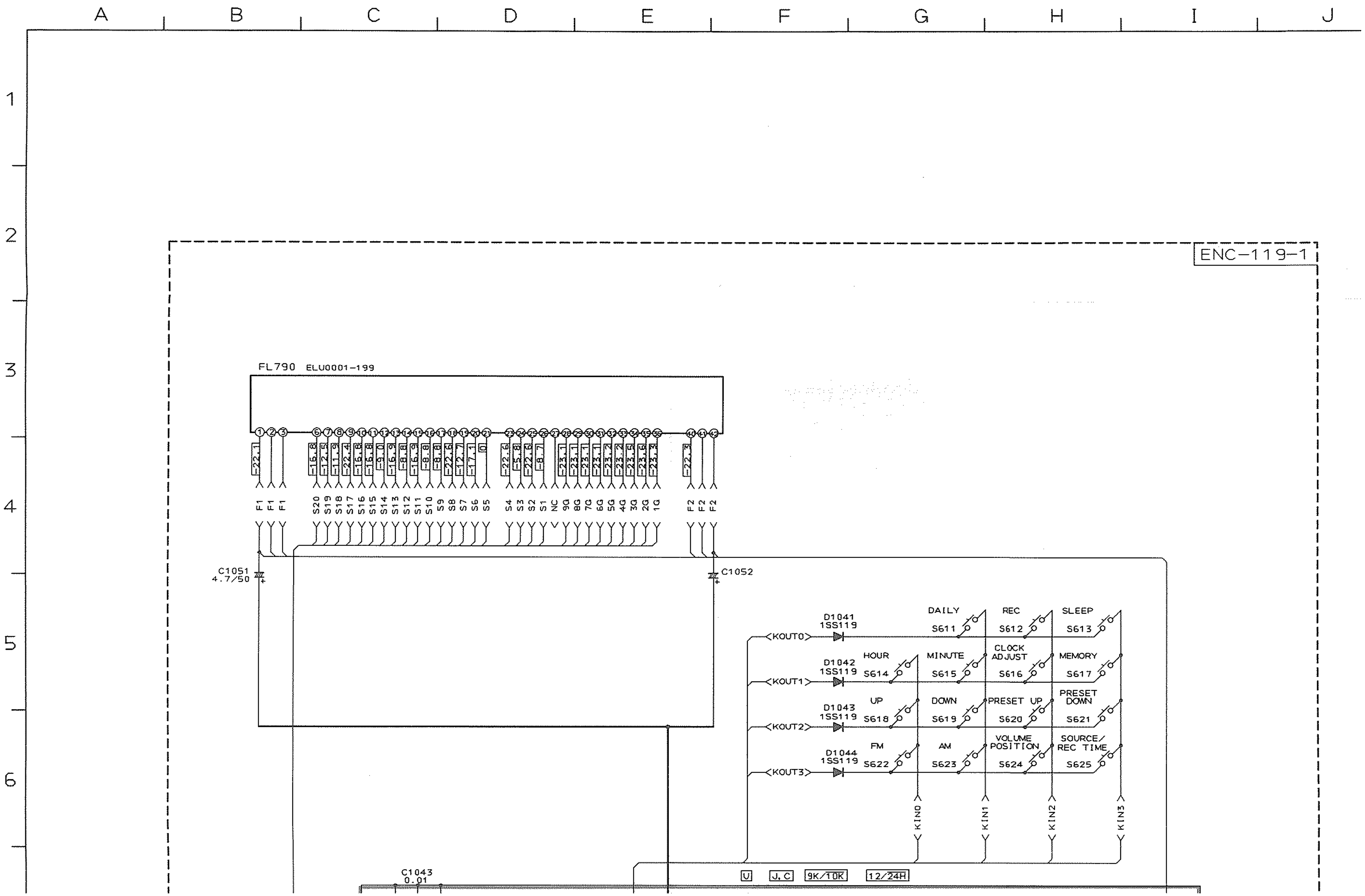
** MARK

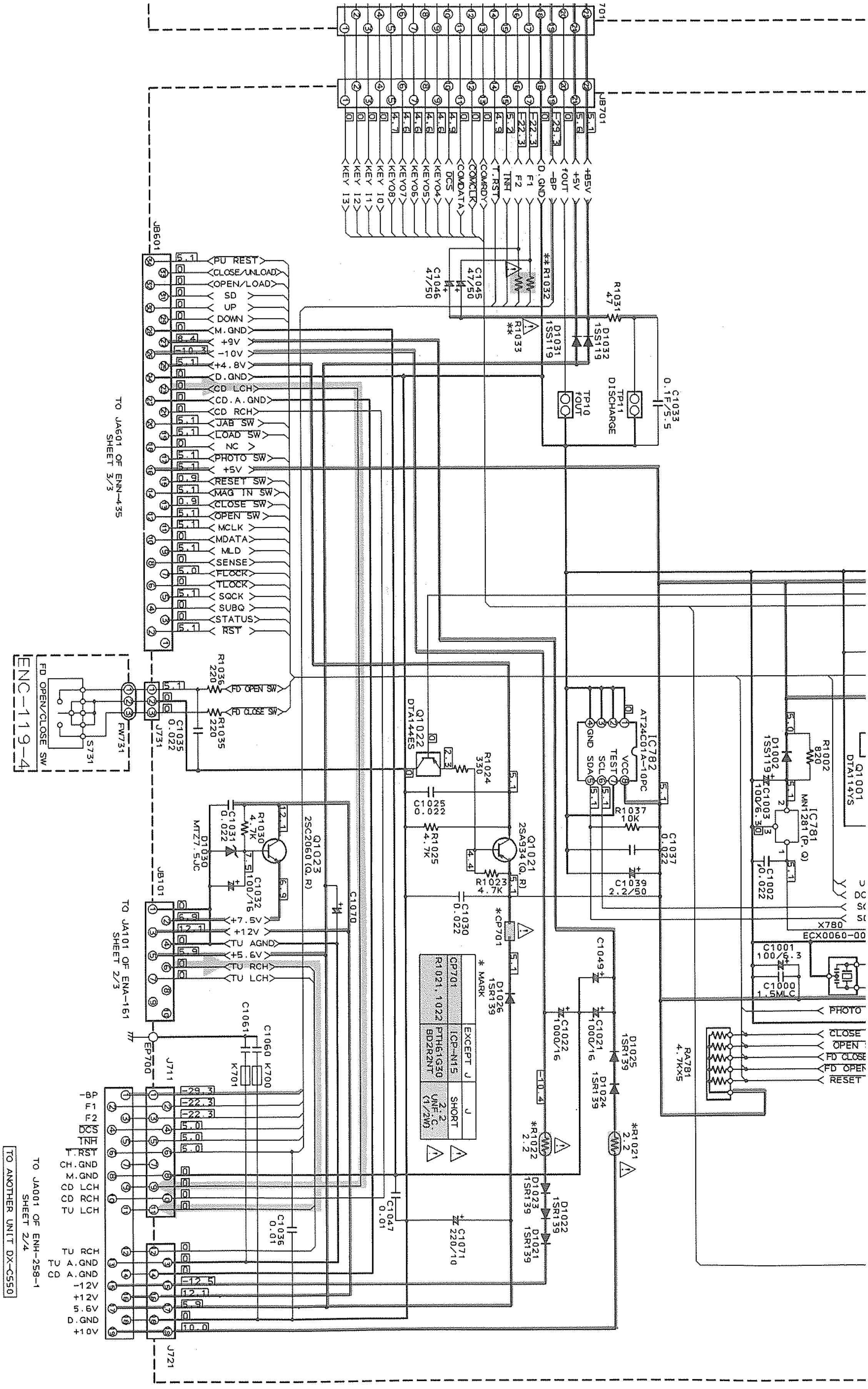
	U, UT, US, UP	J, C
D1070	USED	NONE
D1071	NONE	USED
D1072	NONE	USED
D1073	NONE	USED
W112	USED	NONE
R1032	1.0 UNF.C. (1/4W)	2.7 UNF.C. (1/4W)
R1033	SHORT	1.5 UNF.C. (1/4W)

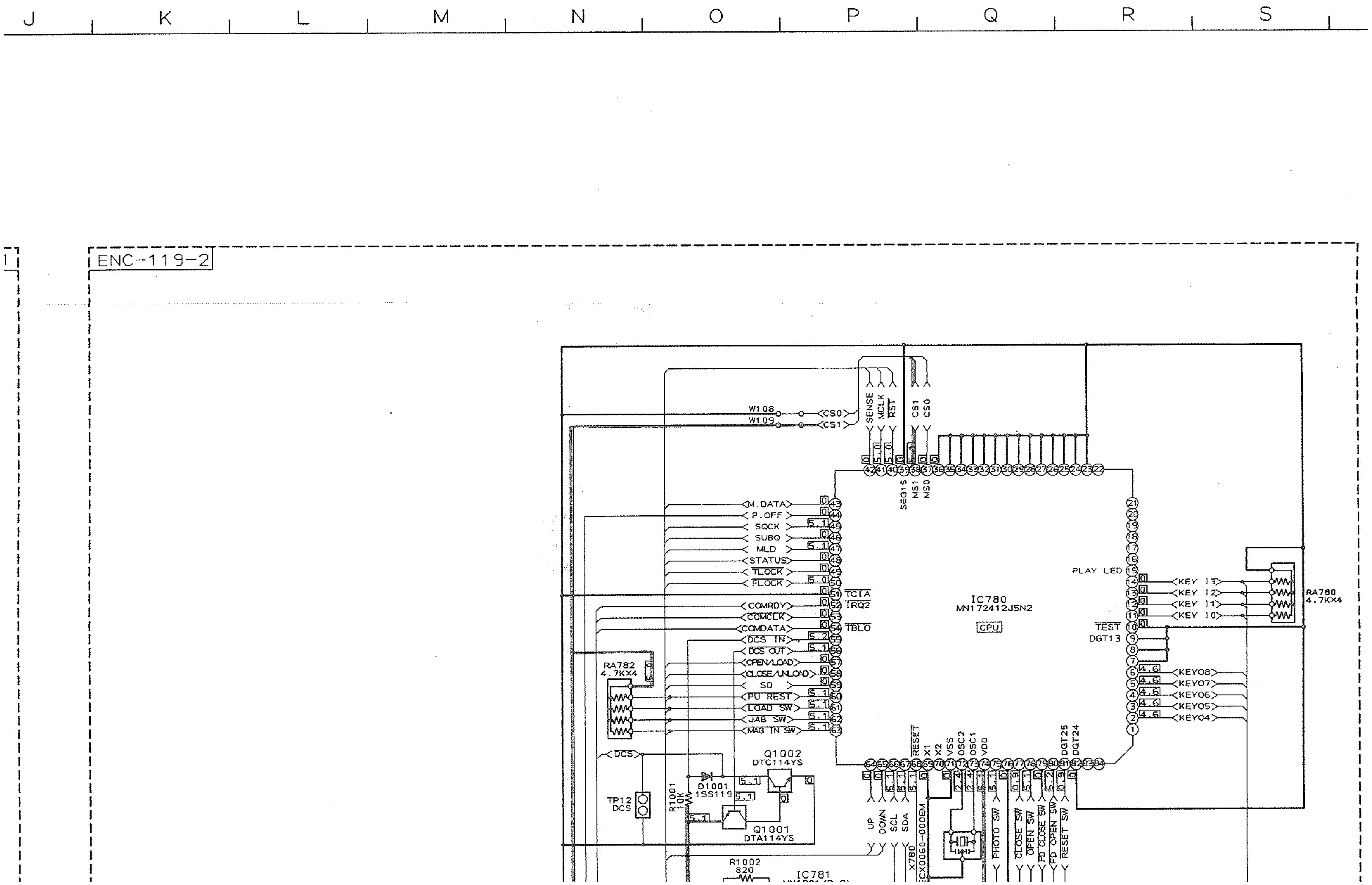
Notes:

1. —— indicates +B power supply.
2. —— indicates −B power supply.
3. ▨ indicates Main signal path.
4. When replacing the parts in the shaded area (▨) and those marked with ⚠, be sure to use the designated parts to ensure safety.
5. This is the standard circuit diagram.
   The design and contents are subject to change without notice.

FL Display & Tuner Controller Section

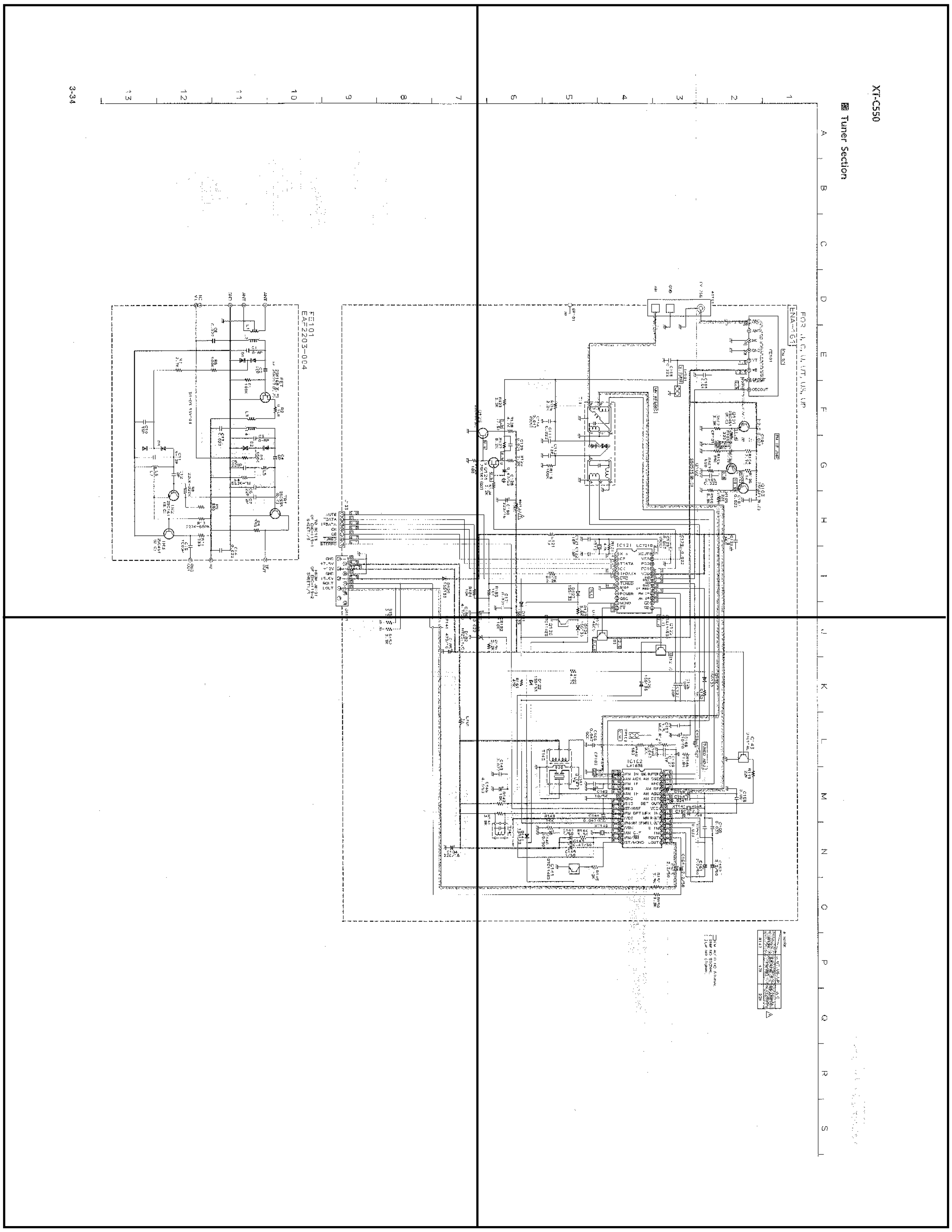

A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
ENC−119−1
FL790 ELU0001-199
F1 −22.1
F1
F1
S20 −16.8
S19 −12.5
S18 −11.9
S17 −22.4
S16 −16.8
S15 −16.8
S14 −9.0
S13 −16.9
S12 −8.8
S11 −16.9
S10 −8.8
S9 −8.8
S8 −22.6
S7 −12.7
S6 −17.1
S5 0
S4 −22.6
S3 −5.8
S2 −22.6
S1 −8.7
NC
9G −23.1
8G −23.1
7G −23.1
6G −23.1
5G −23.2
4G −23.2
3G −23.5
2G −23.6
1G −23.3
F2 −22.3
F2
F2
C1051 4.7/50
C1052
C1043 0.01
D1041 1SS119
D1042 1SS119
D1043 1SS119
D1044 1SS119
KOUT0
KOUT1
KOUT2
KOUT3
DAILY S611
REC S612
SLEEP S613
HOUR S614
MINUTE S615
CLOCK ADJUST S616
MEMORY S617
UP S618
DOWN S619
PRESET UP S620
PRESET DOWN S621
FM S622
AM S623
VOLUME POSITION S624
SOURCE/ REC TIME S625
KIN0
KIN1
KIN2
KIN3
U
J,C
9K/10K
12/24H


JB701
+B5V
+5V
fOUT
-BP
D.GND
F1
F2
INH
T.RST
COMRDY
COMCLK
COMDATA
DCS
KEYO4
KEYO5
KEYO6
KEYO7
KEYO8
KEY 10
KEY 11
KEY 12
KEY 13
JB601
PU REST
CLOSE/UNLOAD
OPEN/LOAD
SD
UP
DOWN
M.GND
+9V
-10V
+4.8V
D.GND
CD LCH
CD.A.GND
CD RCH
JAB SW
LOAD SW
NC
PHOTO SW
+5V
RESET SW
MAG IN SW
CLOSE SW
OPEN SW
MCLK
MDATA
MLD
SENSE
FLOCK
TLOCK
SQCK
SUBQ
STATUS
RST
TO JA601 OF ENN-435 SHEET 3/3
**R1032
R1031 47
D1031 1SS119
D1032 1SS119
R1033 **
C1045 47/50
C1046 47/50
TP10 fOUT
TP11 DISCHARGE
C1033 0.1F/5.5
FD OPEN/CLOSE SW
S731
FW731
J731
ENC-119-4
R1036 220
R1035 220
C1035 0.022
FD OPEN SW
FD CLOSE SW
Q1022 DTA144ES
R1024 330
C1025 0.022
Q1023 2SC2060(Q,R)
R1030 4.7K
C1031 0.022
D1030 MTZ7.5JC
C1032 100/16
C1070
Q1021 2SA934(Q,R)
R1025 4.7K
R1023 4.7K
C1030 0.022
*CP701
IC782 AT24C01A-10PC
VCC TEST SCL SDA GND
R1037 10K
C1037 0.022
C1039 2.2/50
C1049
D1026 1SR139
* MARK
EXCEPT J
J
CP701
ICP-N15
SHORT
R1021,1022
PTH61G30 BD2R2NT
2.2 UNF.C (1/2W)
JB101
+7.5V
+12V
TU AGND
+5.6V
TU RCH
TU LCH
TO JA101 OF ENA-161 SHEET 2/3
C1061
C1060
K700
K701
EP700
J711
-BP
F1
F2
DCS
INH
T.RST
CH.GND
M.GND
CD LCH
CD RCH
TU LCH
TO JA001 OF ENH-258-1 SHEET 2/4
TO ANOTHER UNIT DX-C550
C1036 0.01
C1047 0.01
C1071 220/10
C1022 100/16
C1021 100/16
D1025 1SR139
D1024 1SR139
*R1022 2.2
*R1021 2.2
D1023 1SR139
D1022 1SR139
D1021 1SR139
TU RCH
TU A.GND
CD A.GND
-12V
+12V
5.6V
D.GND
+10V
J721
Q1001 DTA114YS
R1002 820
D1002 1SS119
IC781 MN1281(P,Q)
C1003 100/6.3
C1002 0.022
X780 ECX0060-00
C1001 100/6.3
C1000 1.5MLC
PHOTO
CLOSE
OPEN
FD CLOSE
FD OPEN
RESET
RA781 4.7Kx5


J
K
L
M
N
O
P
Q
R
S
ENC-119-2
W108
W109
CS0
CS1
SENSE
MCLK
RST
SEG15
MS1
MS0
M.DATA
P.OFF
SQCK
SUBQ
MLD
STATUS
TLOCK
FLOCK
COMRDY
COMCLK
COMDATA
DCS IN
DCS OUT
OPEN/LOAD
CLOSE/UNLOAD
SD
PU REST
LOAD SW
JAB SW
MAG IN SW
TCTA
IRQ2
TBLO
IC780
MN172412J5N2
CPU
PLAY LED
KEY 13
KEY 12
KEY 11
KEY 10
TEST
DGT13
KEY08
KEY07
KEY06
KEY05
KEY04
RA780
4.7KX4
RA782
4.7KX4
DCS
TP12
DCS
R1001
10K
D1001
1SS119
Q1002
DTC114YS
Q1001
DTA114YS
R1002
820
IC781
RESET
X1
X2
VSS
OSC2
OSC1
VDD
DGT25
DGT24
UP
DOWN
SCL
SDA
X780
CX0060-000EM
PHOTO SW
CLOSE SW
OPEN SW
FD CLOSE SW
FD OPEN SW
RESET SW
5.1
5.0
5.2
4.6
2.4
0.9
0

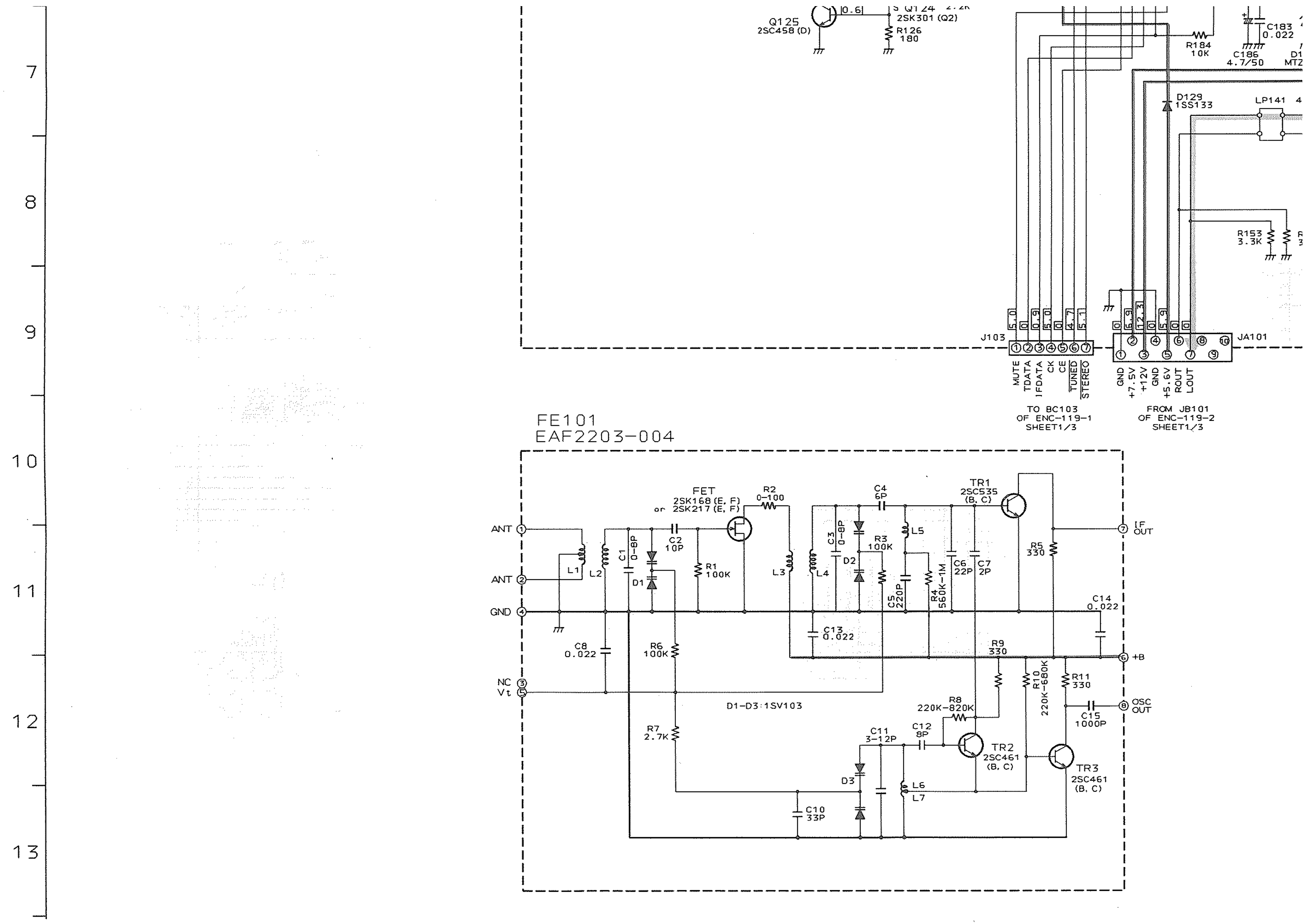
P3-34-a

P3-34-b

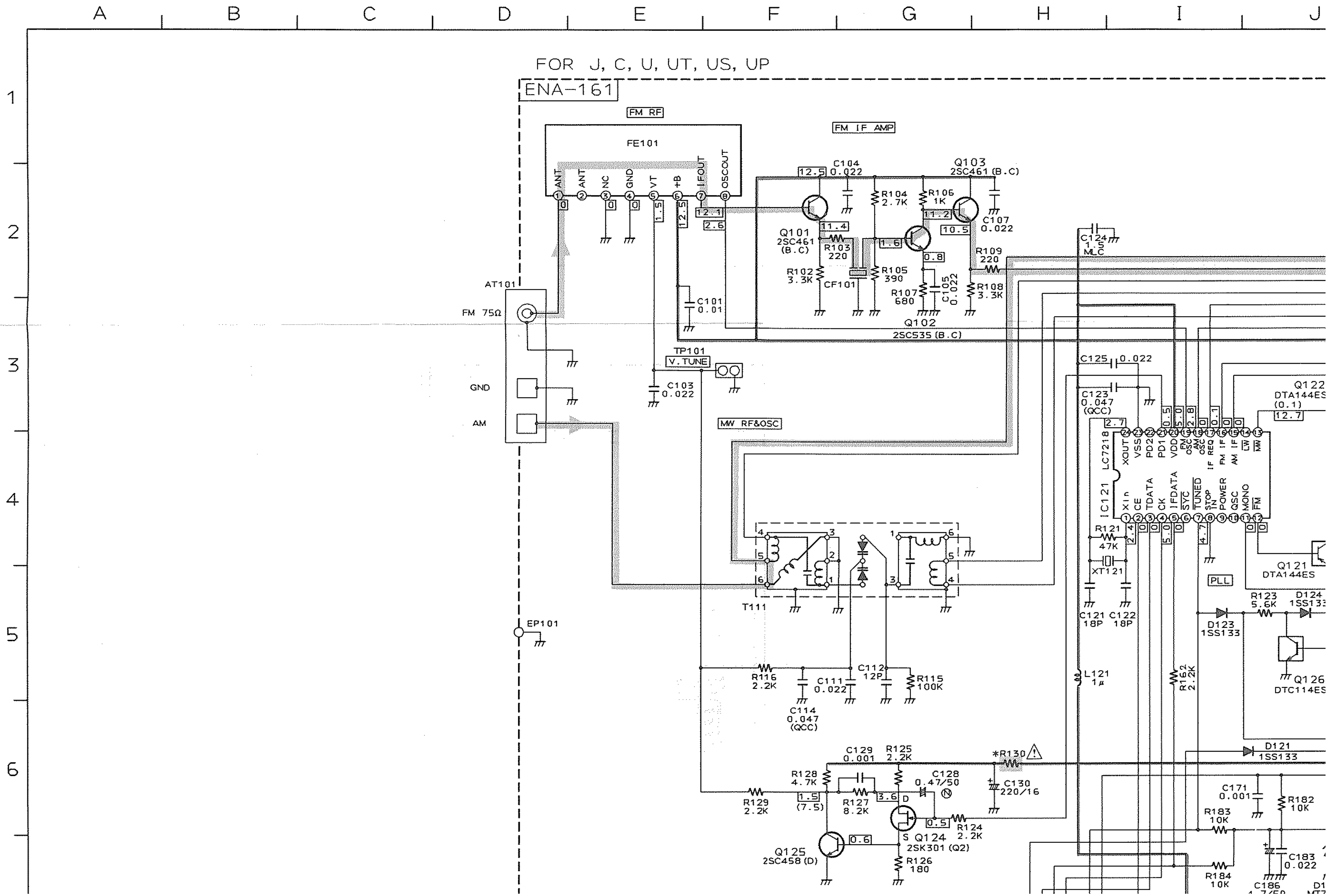

XT-C550
Tuner Section
3-34
FE101
EA-2203-004
IC121
IC122

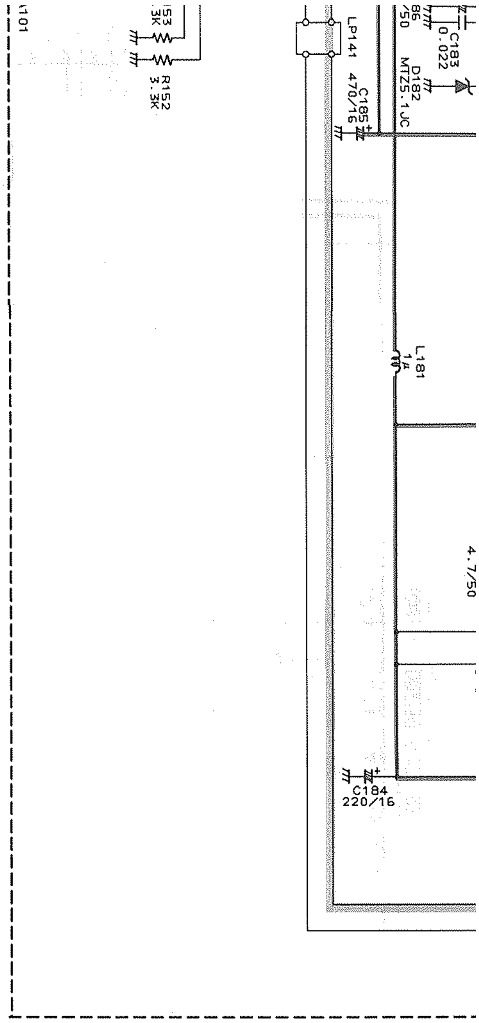
P3-34-c

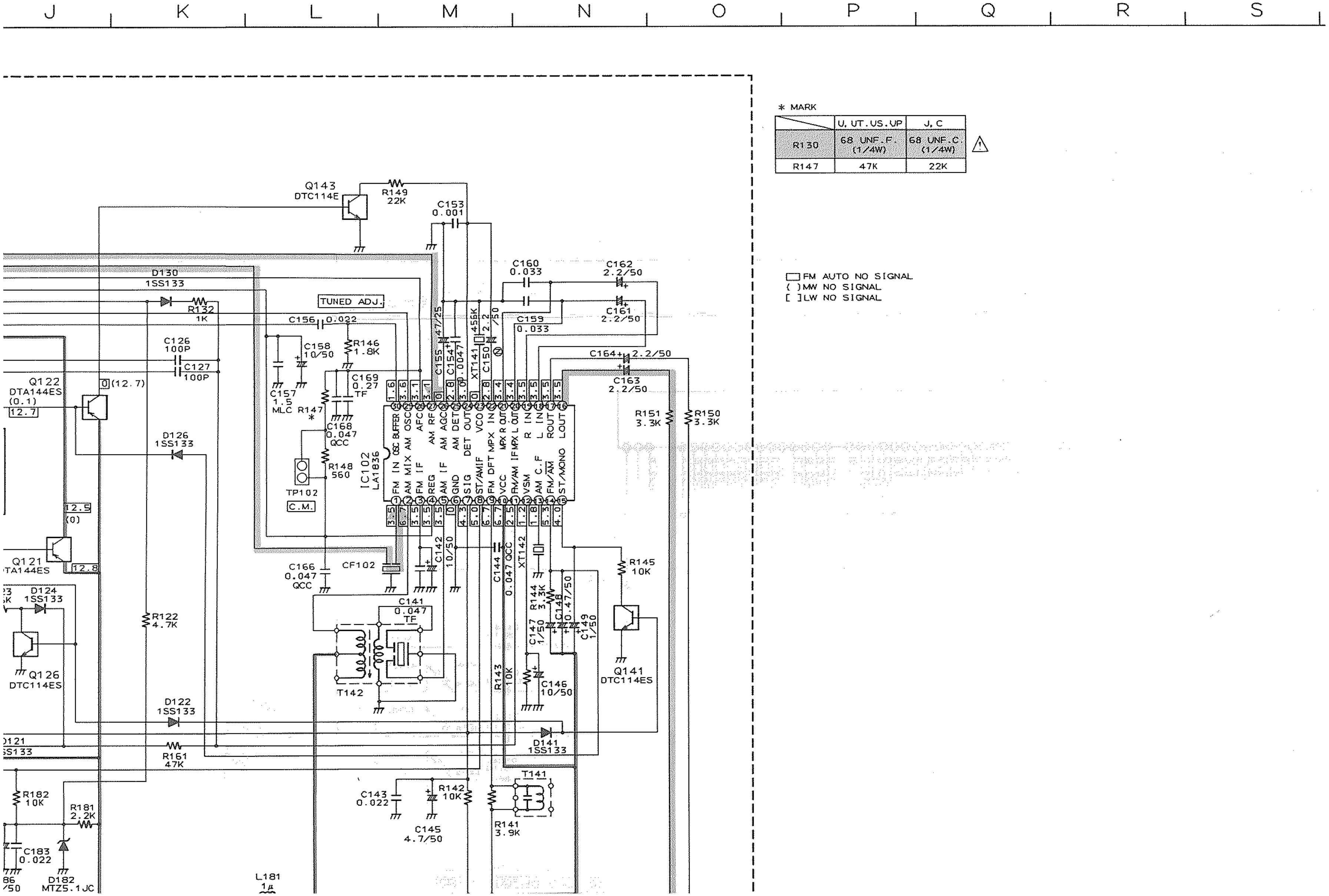
P3-34-d

7
8
9
10
11
12
13
Q125
2SC458 (D)
0.6
Q124
2SK301 (Q2)
R126
180
R184
10K
C183
0.022
C186
4.7/50
D1
MTZ
D129
1SS133
LP141
R153
3.3K
J103
5.0
0
0.9
5.0
0
4.7
5.1
MUTE
TDATA
IFDATA
CK
CE
TUNED
STEREO
TO BC103
OF ENC-119-1
SHEET1/3
JA101
0
6.9
12.3
0
5.9
0
0
GND
+7.5V
+12V
GND
+5.6V
ROUT
LOUT
FROM JB101
OF ENC-119-2
SHEET1/3
FE101
EAF2203-004
ANT ①
ANT ②
GND ④
NC ③
Vt ⑤
L1
L2
C1
0-8P
D1
C2
10P
R1
100K
FET
2SK168 (E, F)
or 2SK217 (E, F)
R2
0-100
L3
L4
C3
0-8P
D2
C4
6P
R3
100K
L5
C5
220P
R4
560K-1M
C6
22P
C7
2P
TR1
2SC535
(B, C)
R5
330
⑦ IF OUT
C14
0.022
⑥ +B
C8
0.022
R6
100K
C13
0.022
R9
330
R10
220K-680K
R11
330
⑧ OSC OUT
C15
1000P
D1-D3:1SV103
R8
220K-820K
R7
2.7K
C11
3-12P
C12
8P
TR2
2SC461
(B, C)
TR3
2SC461
(B, C)
D3
L6
L7
C10
33P

■ Tuner Section


A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
FOR J, C, U, UT, US, UP
ENA-161
FM RF
FE101
ANT
ANT
NC
GND
VT
+B
I.FOUT
OSCOUT
FM IF AMP
12.5
C104 0.022
R104 2.7K
R106 1K
Q103 2SC461 (B.C)
C107 0.022
Q101 2SC461 (B.C)
11.4
R103 220
R102 3.3K
CF101
R105 390
R107 680
C105 0.022
R109 220
R108 3.3K
Q102 2SC535 (B.C)
1.6
0.8
11.2
10.5
12.1
2.6
1.5
AT101
FM 75Ω
GND
AM
C101 0.01
TP101
V.TUNE
C103 0.022
MW RF&OSC
T111
EP101
R116 2.2K
C114 0.047 (QCC)
C111 0.022
C112 12P
R115 100K
C129 0.001
R125 2.2K
R128 4.7K
C128 0.47/50
*R130
C130 220/16
R129 2.2K
1.5
(7.5)
R127 8.2K
3.6
0.6
0.5
R124 2.2K
Q125 2SC458 (D)
Q124 2SK301 (Q2)
R126 180
C124 1 MLC
C125 0.022
C123 0.047 (QCC)
2.7
IC121 LC7218
XOUT
VSS
PD2
PD1
VDD
FM OSC
AM OSC
IF REQ
FM IF
AM IF
LW
MW
Xin
CE
TDATA
CK
IFDATA
SYC
TUNED
STOP IN
POWER
QSC
MONO
FM
R121 47K
XT121
C121 18P
C122 18P
2.4
5.0
4.7
0.5
2.8
0.1
12.7
Q122 DTA144ES (0.1)
Q121 DTA144ES
PLL
R123 5.6K
D124 1SS133
D123 1SS133
Q126 DTC114ES
L121 1μ
R162 2.2K
D121 1SS133
C171 0.001
R182 10K
R183 10K
R184 10K
C183 0.022
C186


101
153
3K
R152
3.3K
LP141
C185
470/16
86
/50
D182
MTZ5.1JC
C183
0.022
L181
1µ
4.7/50
C184
220/16


J
K
L
M
N
O
P
Q
R
S
IC102
LA1836
FM IN
AM MIX
FM IF
REG
AM IF
GND
SIG
ST/AMIF
FM DFT
VCC
FM/AM IF
VSM
AM C.F
FM/AM
ST/MONO
OSC BUFFER
AM OSC
AFC
AM RF
AM AGC
AM DET
DET OUT
VCO
MPX IN
MPX R OUT
MPX L OUT
R IN
L IN
ROUT
LOUT
Q143
DTC114E
R149
22K
C153
0.001
D130
1SS133
R132
1K
TUNED ADJ.
C156
0.022
C126
100P
C127
100P
C158
10/50
R146
1.8K
C157
1.5
MLC
R147
*
C169
0.27
TF
C168
0.047
QCC
R148
560
TP102
C.M.
C155
47/25
C154
0.0047
XT141
456K
C150
2.2
/50
C160
0.033
C159
0.033
C162
2.2/50
C161
2.2/50
C164
2.2/50
C163
2.2/50
R151
3.3K
R150
3.3K
Q122
DTA144ES
(0.1)
12.7
(12.7)
D126
1SS133
12.5
(0)
Q121
DTA144ES
12.8
D124
1SS133
Q126
DTC114ES
R122
4.7K
C166
0.047
QCC
CF102
C142
10/50
C144
0.047 QCC
XT142
R145
10K
Q141
DTC114ES
C141
0.047
TF
T142
R144
3.3K
C148
0.47/50
C147
1/50
C149
1/50
C146
10/50
R143
10K
D122
1SS133
D141
1SS133
D121
1SS133
R161
47K
R182
10K
R181
2.2K
C183
0.022
D182
MTZ5.1JC
C143
0.022
R142
10K
C145
4.7/50
R141
3.9K
T141
L181
1μ
3.5
6.7
3.5
3.5
3.5
0
4.3
5.0
6.7
6.7
2.5
1.2
1.8
5.3
4.0
1.6
3.6
3.1
3.1
0
2.8
3.0
0
2.8
3.4
3.4
3.5
3.5
3.5
3.5

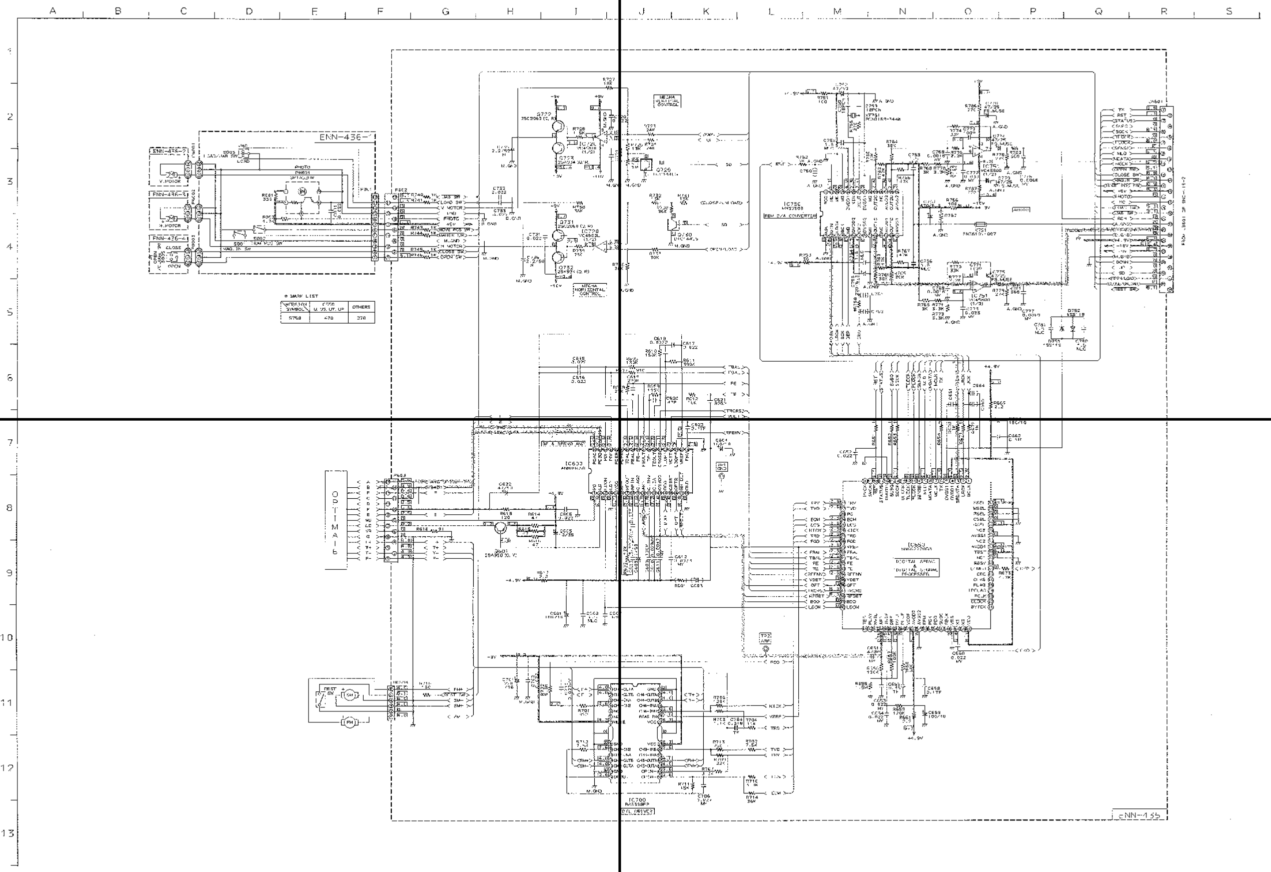
* MARK

	U, UT, US, UP	J, C
R130	68 UNF.F. (1/4W)	68 UNF.C. (1/4W) ⚠
R147	47K	22K

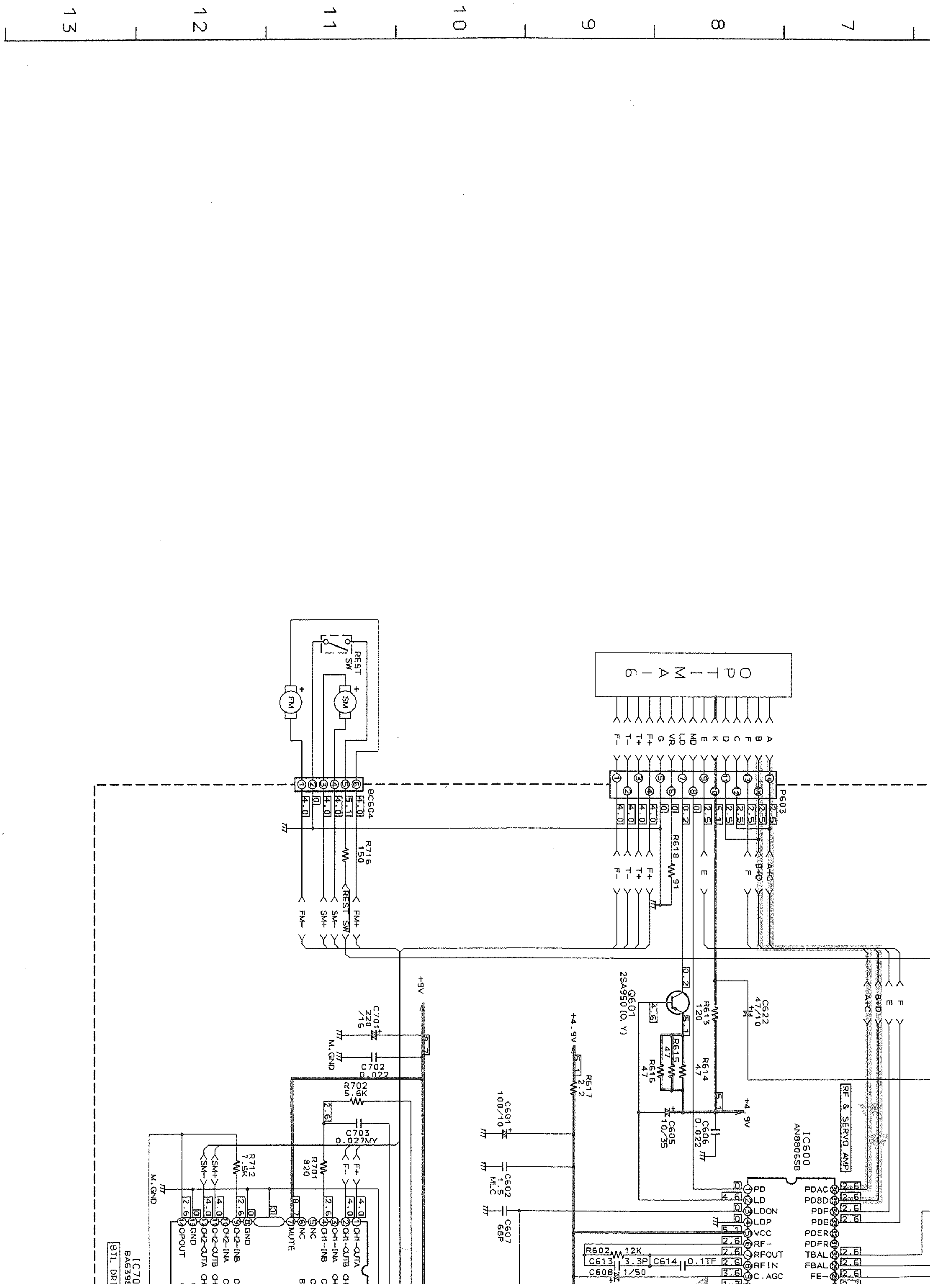
□ FM AUTO NO SIGNAL
( ) MW NO SIGNAL
[ ] LW NO SIGNAL

P3-35-b P3-35-d

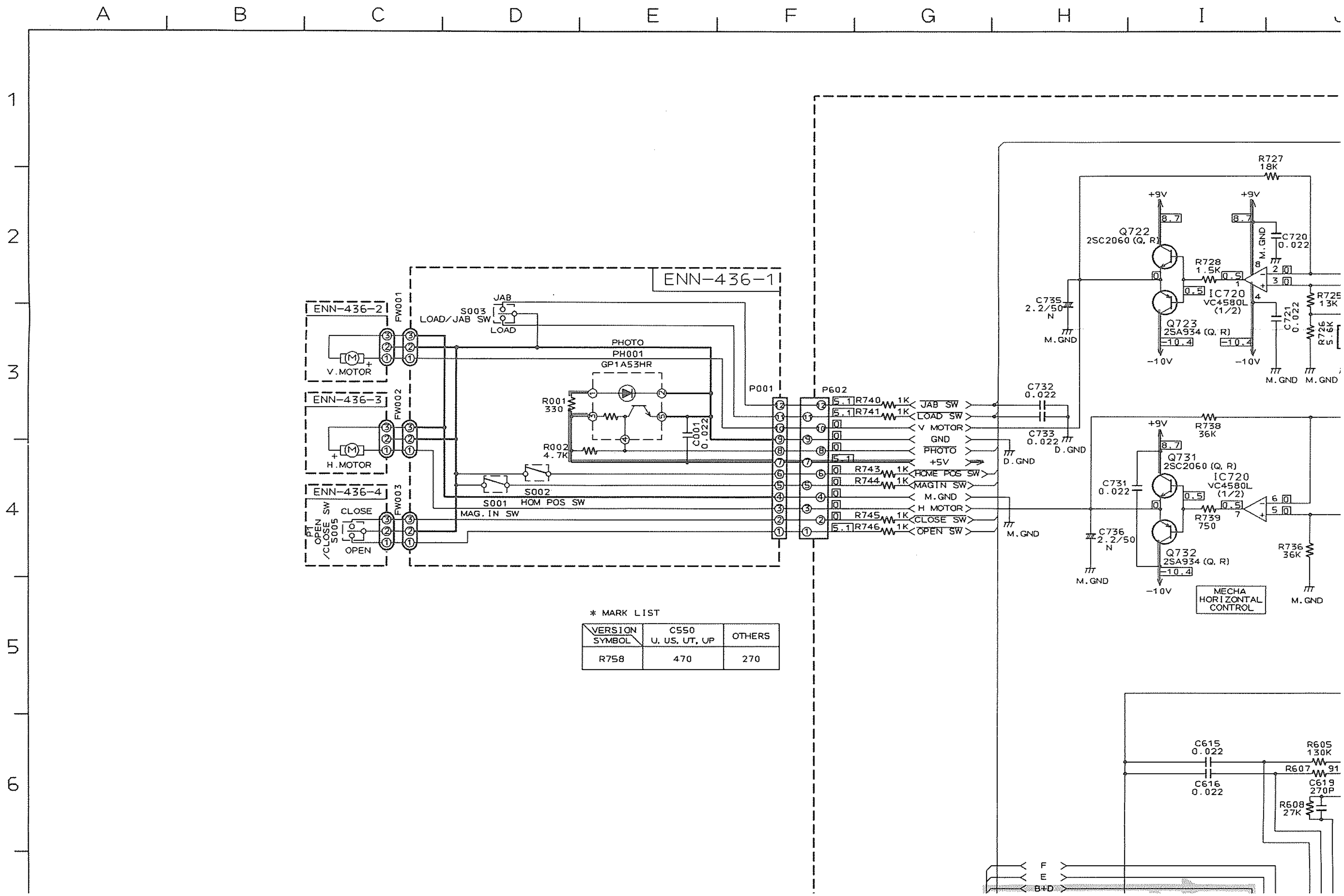
CD Section


ENN-436-1
ENN-435
OPTIMA-6
IC653
IC756
DIGITAL AUDIO PROCESSOR

P3-35-a P3-35-c

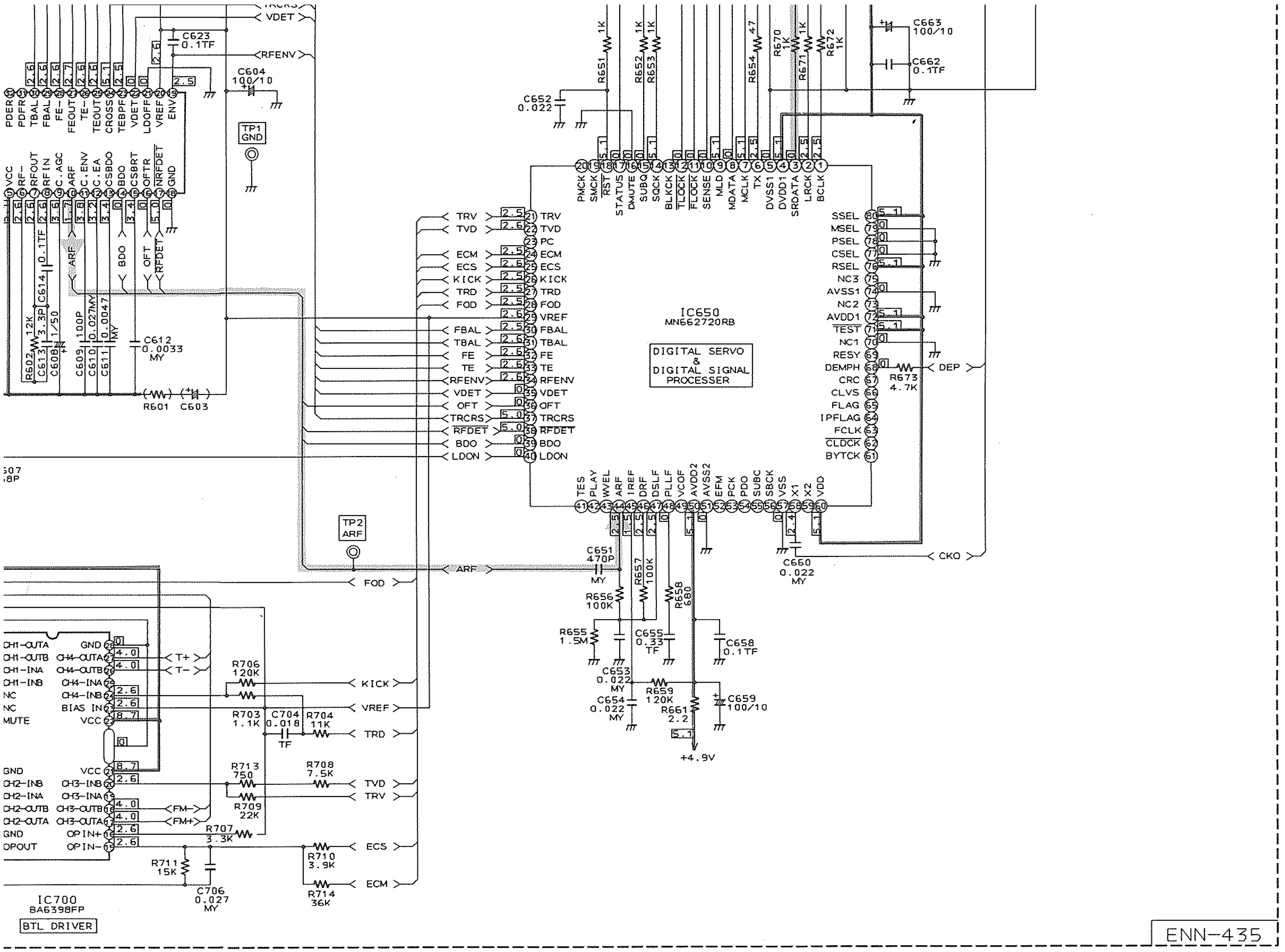

13
12
11
10
9
8
7
OPTIMA-6
P603
A
B
F
C
D
K
E
MD
LD
VR
G
F+
T+
T-
F-
A+C
B+D
F
E
R618
91
BC604
REST SW
SM
FM
R716
150
FM+
REST SW
SM-
SM+
FM-
Q601
2SA950(O,Y)
R613
120
C622
47/10
R614
47
R615
47
R616
47
C605
10/35
C606
0.022
+4.9V
IC600
AN8805SB
RF & SERVO AMP
R617
2.2
C601
100/10
C602
1.5
MLC
C607
68P
R602
12K
C613
3.3P
C614
0.1TF
C608
1/50
PD
LD
LDON
LDP
VCC
RF-
RFOUT
RFIN
C.AGC
PDAC
PDBD
PDF
PDE
PDER
PDFR
TBAL
FBAL
FE-
+9V
C701
220
/16
C702
0.022
M.GND
R702
5.6K
C703
0.027MY
R701
820
R712
7.5K
SM-
SM+
F-
F+
IC70
BA639
BTL DR
OPOUT
GND
CH2-OUTA
CH2-OUTB
CH2-INA
CH2-INB
GND
MUTE
NC
NC
CH1-INB
CH1-INA
CH1-OUTB
CH1-OUTA

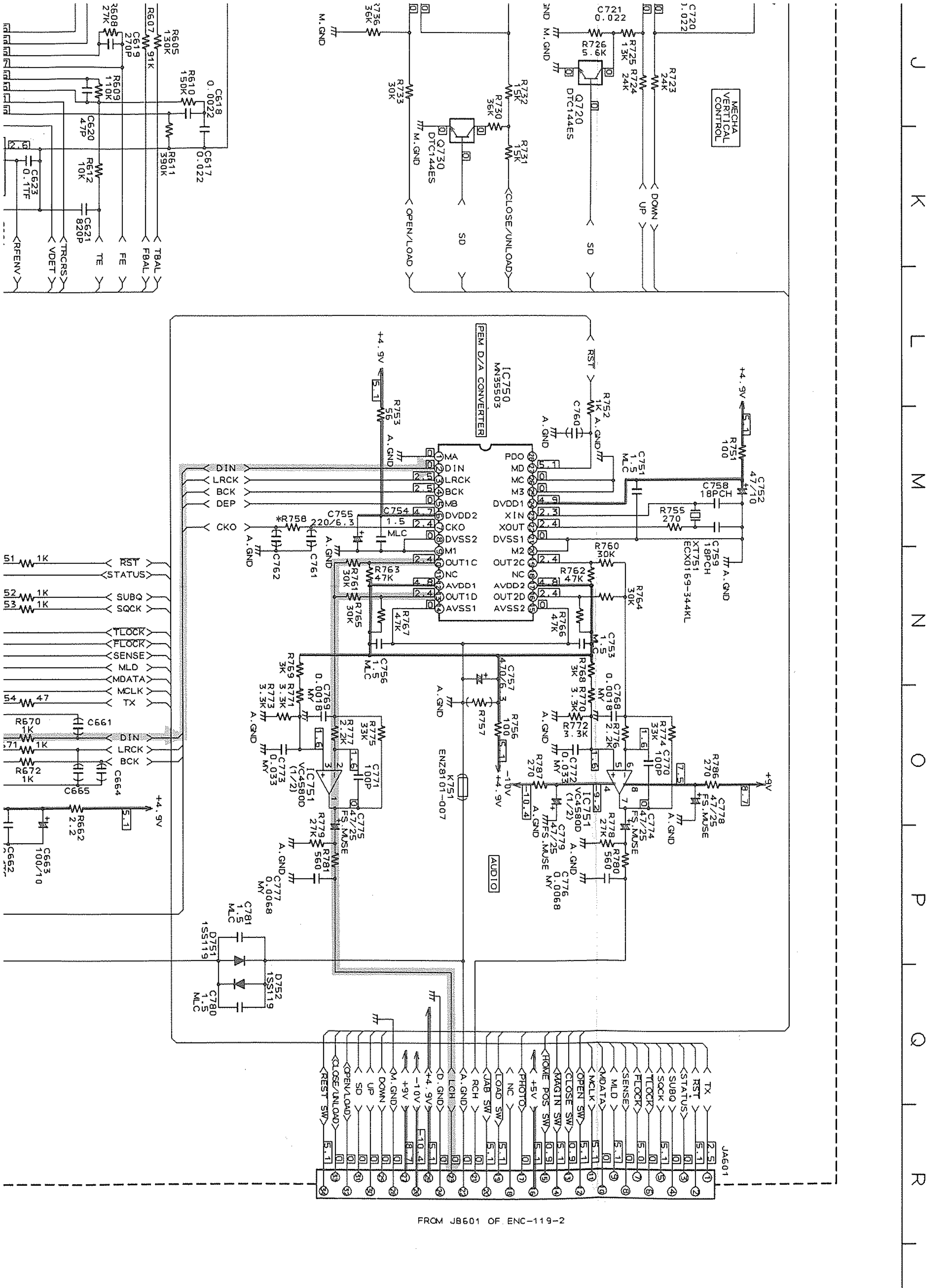
CD Section


A
B
C
D
E
F
G
H
I
1
2
3
4
5
6
ENN-436-1
ENN-436-2
ENN-436-3
ENN-436-4
FW001
FW002
FW003
V.MOTOR
H.MOTOR
PT OPEN /CLOSE SW S005
CLOSE
OPEN
JAB
S003
LOAD/JAB SW
LOAD
PHOTO
PH001
GP1A53HR
R001 330
R002 4.7K
C001 0.022
S001
S002
HOM POS SW
MAG. IN SW
P001
P602
R740 1K
R741 1K
R743 1K
R744 1K
R745 1K
R746 1K
5.1
JAB SW
LOAD SW
V MOTOR
GND
PHOTO
+5V
HOME POS SW
MAGIN SW
M.GND
H MOTOR
CLOSE SW
OPEN SW
D.GND
C732 0.022
C733 0.022
C735 2.2/50 N
C736 2.2/50 N
C731 0.022
R727 18K
+9V
-10V
8.7
-10.4
0.5
Q722 2SC2060 (Q, R)
Q723 2SA934 (Q, R)
Q731 2SC2060 (Q, R)
Q732 2SA934 (Q, R)
R728 1.5K
IC720 VC4580L (1/2)
C720 0.022
C721 0.022
R725 13K
R726 5.6K
R738 36K
R739 750
R736 36K
MECHA HORIZONTAL CONTROL
C615 0.022
C616 0.022
R605 130K
R607 91
C619 270P
R608 27K
F
E
B+D

* MARK LIST

VERSION / SYMBOL	C550 U, US, UT, UP	OTHERS
R758	470	270

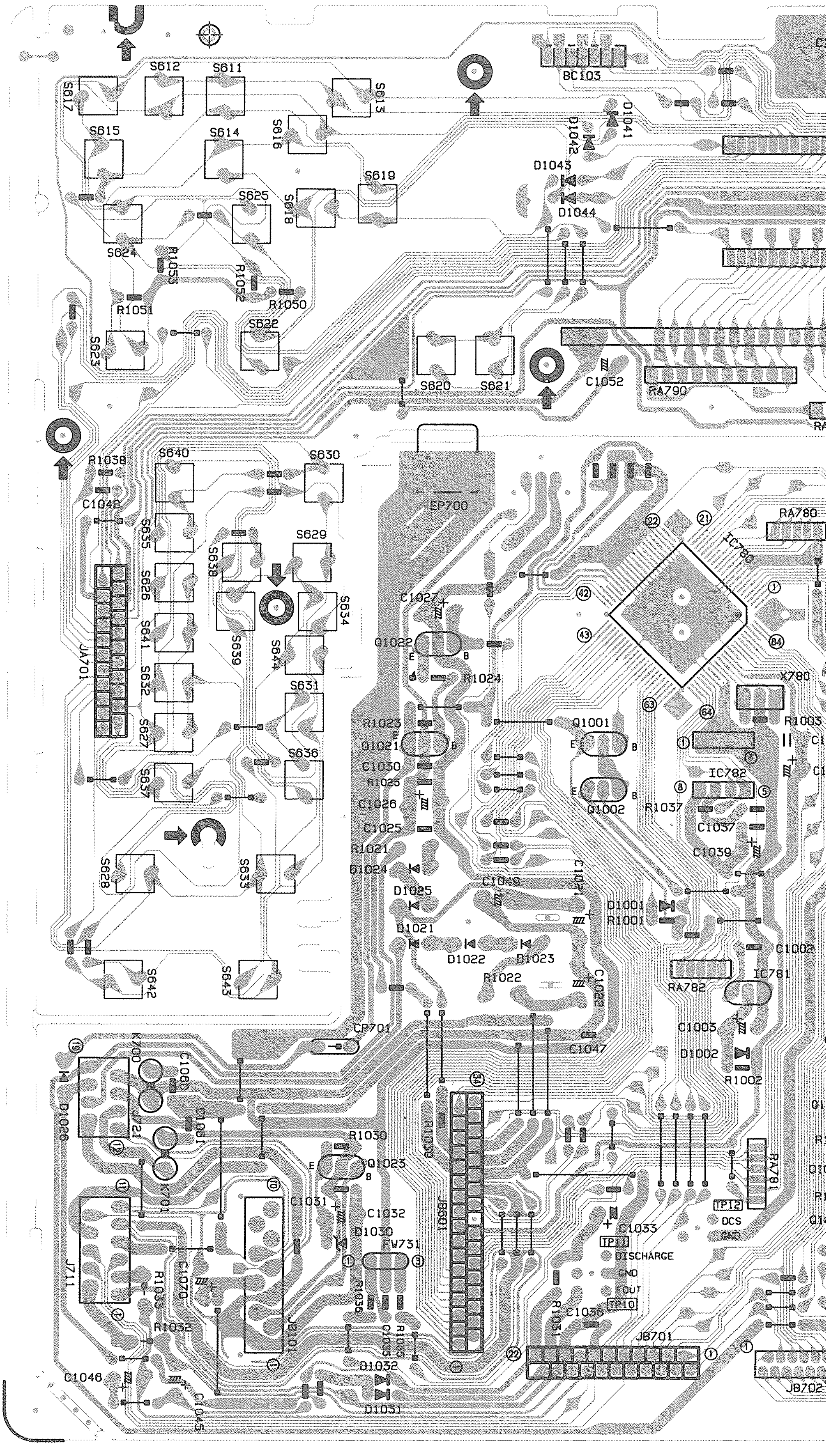

IC650
MN662720RB
DIGITAL SERVO & DIGITAL SIGNAL PROCESSER
IC700
BA6398FP
BTL DRIVER
ENN-435
TP1 GND
TP2 ARF
PMCK
SMCK
RST
STATUS
DMUTE
SUBQ
SQCK
BLKCK
TLOCK
FLOCK
SENSE
MLD
MDATA
MCLK
TX
DVSS1
DVDD1
SRDATA
LRCK
BCLK
TRV
TVD
PC
ECM
ECS
KICK
TRD
FOD
VREF
FBAL
TBAL
FE
TE
RFENV
VDET
OFT
TRCRS
RFDET
BDO
LDON
TES
PLAY
WVEL
ARF
IREF
DRF
DSLF
PLLF
VCOF
AVDD2
AVSS2
EFM
PCK
PDO
SUBC
SBCK
VSS
X1
X2
VDD
SSEL
MSEL
PSEL
CSEL
RSEL
NC3
AVSS1
NC2
AVDD1
TEST
NC1
RESY
DEMPH
CRC
CLVS
FLAG
IPFLAG
FCLK
CLDCK
BYTCK
DEP
CKO
VCC
RF-
RFOUT
RFIN
C.AGC
C.ENV
C.EA
CSBDO
CSBRT
OFTR
NRFDET
GND
PDER
PDFR
FE-
FEOUT
TE-
TEOUT
CROSS
TEBPF
LDOFF
ENV
CH1-OUTA
CH1-OUTB
CH1-INA
CH1-INB
NC
MUTE
CH2-INB
CH2-INA
CH2-OUTB
CH2-OUTA
OPOUT
CH4-OUTA
CH4-OUTB
CH4-INA
CH4-INB
BIAS IN
CH3-INB
CH3-INA
CH3-OUTB
CH3-OUTA
OPIN+
OPIN-
T+
T-
FM-
FM+
R601
R602 12K
R651 1K
R652 1K
R653 1K
R654 47
R655 1.5M
R656 100K
R657 100K
R658 680
R659 120K
R661 2.2
R670 1K
R671 1K
R672 1K
R673 4.7K
R703 1.1K
R704 11K
R706 120K
R707 3.3K
R708 7.5K
R709 22K
R710 3.9K
R711 15K
R713 750
R714 36K
C603
C604 100/10
C608 1/50
C609 100P
C610 0.027MY
C611 0.0047 MY
C612 0.0033 MY
C613 3.3P
C614 0.1TF
C623 0.1TF
C651 470P MY
C652 0.022
C653 0.022 MY
C654 0.022 MY
C655 0.33 TF
C658 0.1TF
C659 100/10
C660 0.022 MY
C662 0.1TF
C663 100/10
C704 0.018 TF
C706 0.027 MY
+4.9V
2.5
2.6
2.7
1.5
1.7
2.4
3.2
3.4
3.5
3.8
4.0
5.0
5.1
8.7
0

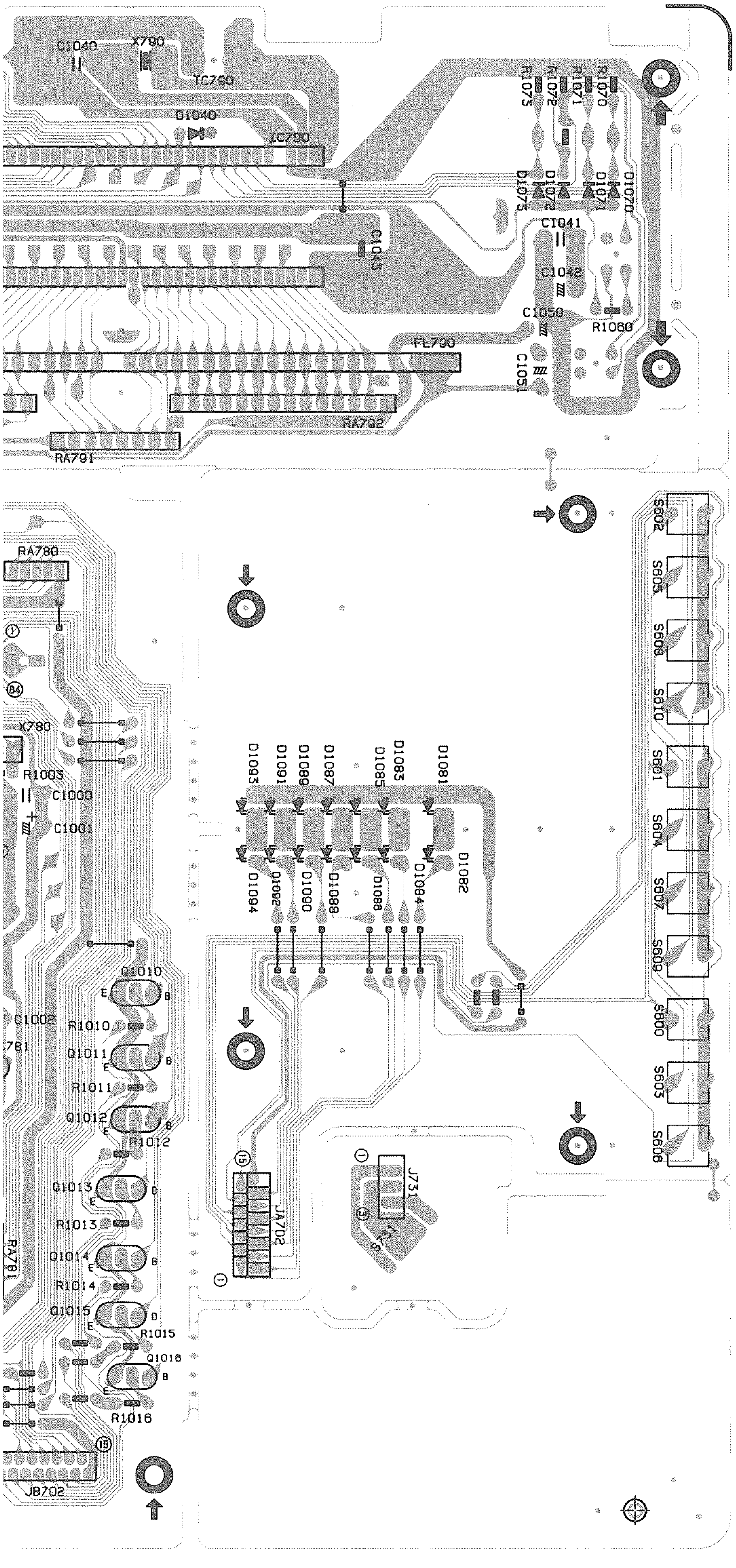

IC750
MN35503
PCM D/A CONVERTER
IC751
VC4580D
(1/2)
MECHA VERTICAL CONTROL
Q730
DTC144ES
Q720
DTC144ES
X751
ECX0169-344KL
K751
ENZ8101-007
AUDIO
MA
DIN
LRCK
BCK
MB
DVDD2
CKO
DVSS2
M1
OUT1C
NC
AVDD1
OUT1D
AVSS1
PDO
MD
MC
M3
DVDD1
XIN
XOUT
DVSS1
M2
OUT2C
AVDD2
OUT2D
AVSS2
RST
STATUS
SUBQ
SQCK
TLOCK
FLOCK
SENSE
MLD
MDATA
MCLK
TX
DEP
CKO
RFENV
VDET
TRCRS
TE
FE
FBAL
TBAL
OPEN/LOAD
CLOSE/UNLOAD
SD
UP
DOWN
M.GND
A.GND
+4.9V
+9V
-10V
JA601
REST SW
DOWN
+9V
D.GND
LCH
RCH
LOAD SW
TAB SW
NC
PHOTO
+5V
HOME POS SW
MAGTN SW
CLOSE SW
OPEN SW
FROM J8601 OF ENC-119-2
J
K
L
M
N
O
P
Q
R
S

XT-C550

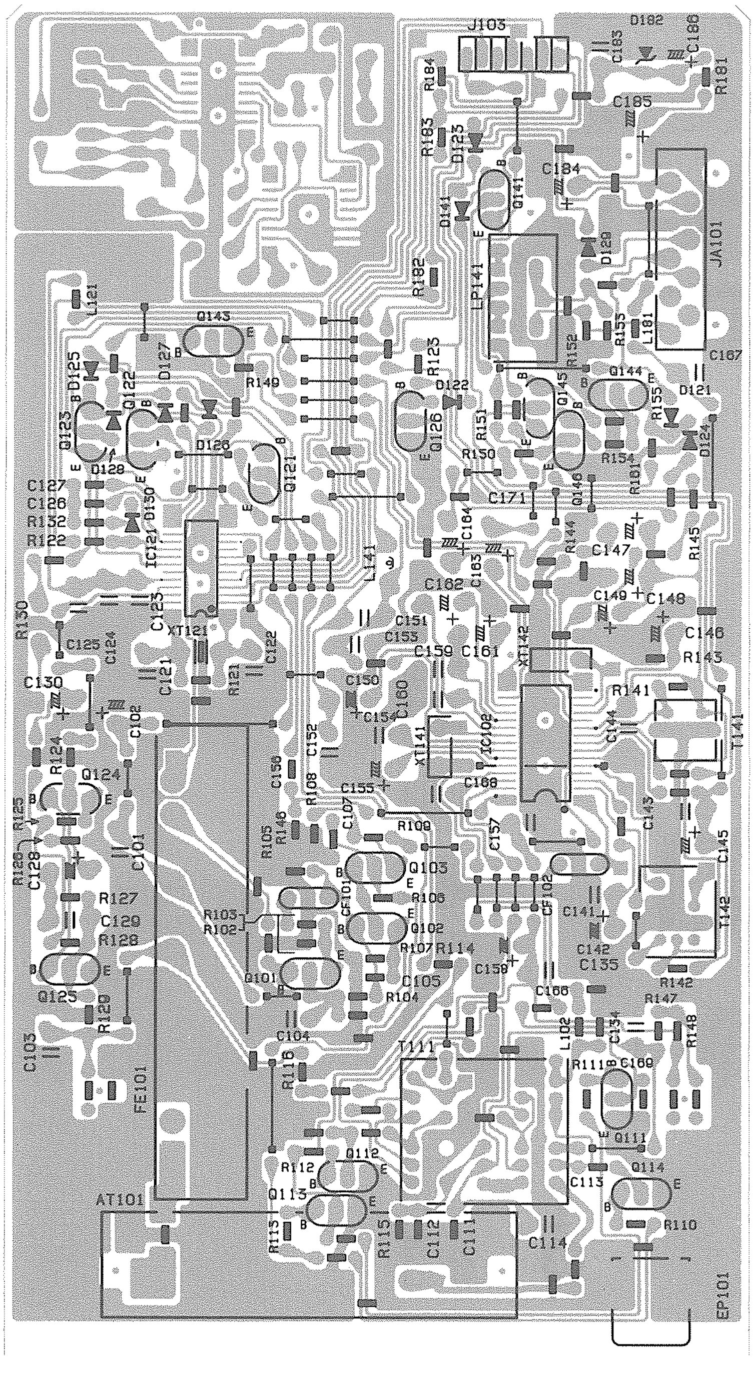
Printed Circuit Boards

■ Display & Tuner control P.C. Board (ENC-119)


S617
S612
S611
S613
BC103
D1041
D1042
S616
S615
S614
D1043
S619
S625
S618
D1044
S624
R1053
R1052
R1050
R1051
S623
S622
S620
S621
C1052
RA790
R1038
S640
S630
C1048
EP700
RA780
S635
S638
S629
IC780
S626
C1027
S634
JA701
S641
S639
S644
Q1022
S632
R1024
S631
X780
R1023
Q1001
R1003
Q1021
S627
S636
C1030
R1025
IC782
S637
C1026
Q1002
R1037
C1037
C1025
C1039
R1021
S628
S633
D1024
C1021
C1049
D1025
D1001
R1001
D1021
D1022
D1023
C1002
S642
S643
R1022
RA782
IC781
C1022
CP701
C1003
C1047
K700
C1060
D1002
R1002
J721
D1026
C1061
R1039
RA781
R1030
Q1023
K701
JB601
TP12
DCS
GND
C1031
C1032
C1033
D1030
FW731
TP11
DISCHARGE
GND
J711
R1033
C1070
R1036
FOUT
TP10
R1031
C1036
JB101
R1032
C1035
R1035
JB701
C1046
D1032
JB702
C1045
D1031


C1040
X790
TC790
D1040
IC790
R1073
R1072
R1071
R1070
D1073
D1072
D1071
D1070
C1041
C1042
C1043
C1050
R1060
FL790
C1051
RA792
RA791
S602
S605
S608
S610
S601
S604
S607
S609
S600
S603
S606
RA780
①
X780
R1003
C1000
C1001
D1093
D1091
D1089
D1087
D1085
D1083
D1081
D1094
D1092
D1090
D1088
D1086
D1084
D1082
Q1010
C1002
R1010
Q1011
R1011
Q1012
R1012
Q1013
R1013
Q1014
R1014
Q1015
R1015
Q1016
R1016
RA781
⑮
JB702
⑮
JA702
①
J731
S731
E
B

■ Tuner P.C. Board (ENA-161)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L121
Q143
R149
R123
D122
R152
R153
L181
C187
Q144
D125
Q122
D127
Q126
R151
Q145
R155
D121
Q123
D128
D126
Q121
R150
Q146
R154
R101
D124
C127
C126
R132
R122
D130
IC121
C171
C164
R144
C147
R145
L141
C162
C163
C149
C148
R130
C125
C124
C123
XT121
C151
C153
C159
C161
XT142
C146
R143
C130
C121
R121
C122
C150
C160
R141
C102
C154
XT141
IC102
C144
T141
R124
Q124
C156
R108
C152
C155
C168
R125
R126
C128
C101
R146
R105
C107
R109
C157
C143
C145
R103
R102
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Q103
R106
Q102
CF102
C141
C142
T142
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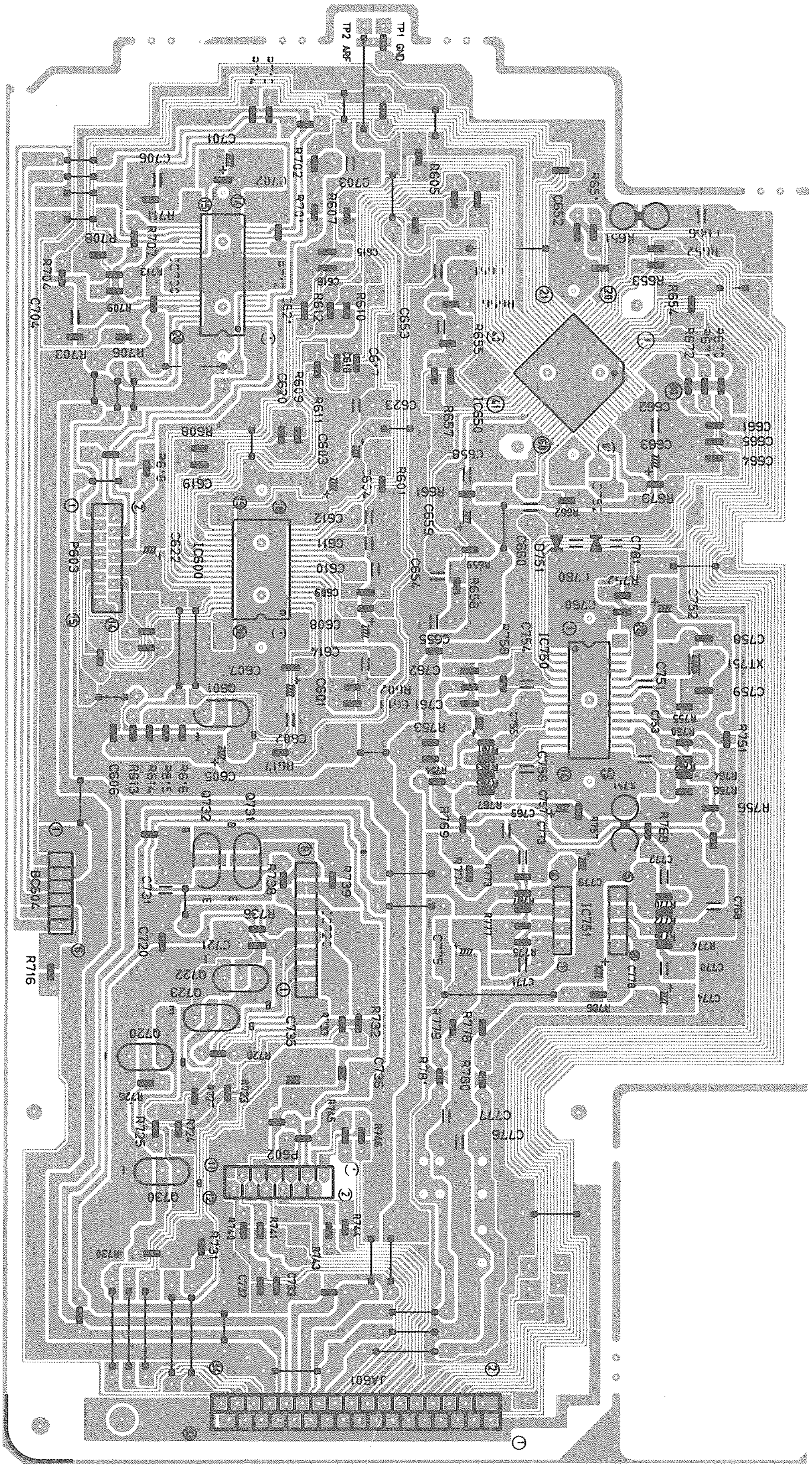
C129
R128
R107
R114
C158
C135
Q101
C105
R104
C166
R142
R147
Q125
R129
C104
L102
C134
R148
C103
FE101
R116
T111
R111
C169
Q111
Q112
R112
Q114
AT101
Q113
C113
R113
R115
C112
C111
C114
R110
EP101
B
E

■ CD control P.C. Board (ENN-435)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IC650
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IC750
IC751
P603
P602
BC604
JA601
D751
XT751
Q720
Q722
Q723
Q730
Q731
Q732
R716

DX-C550

<PARTS LIST>

※ **All printed circuit boards and its assemblies are not available as service parts.**

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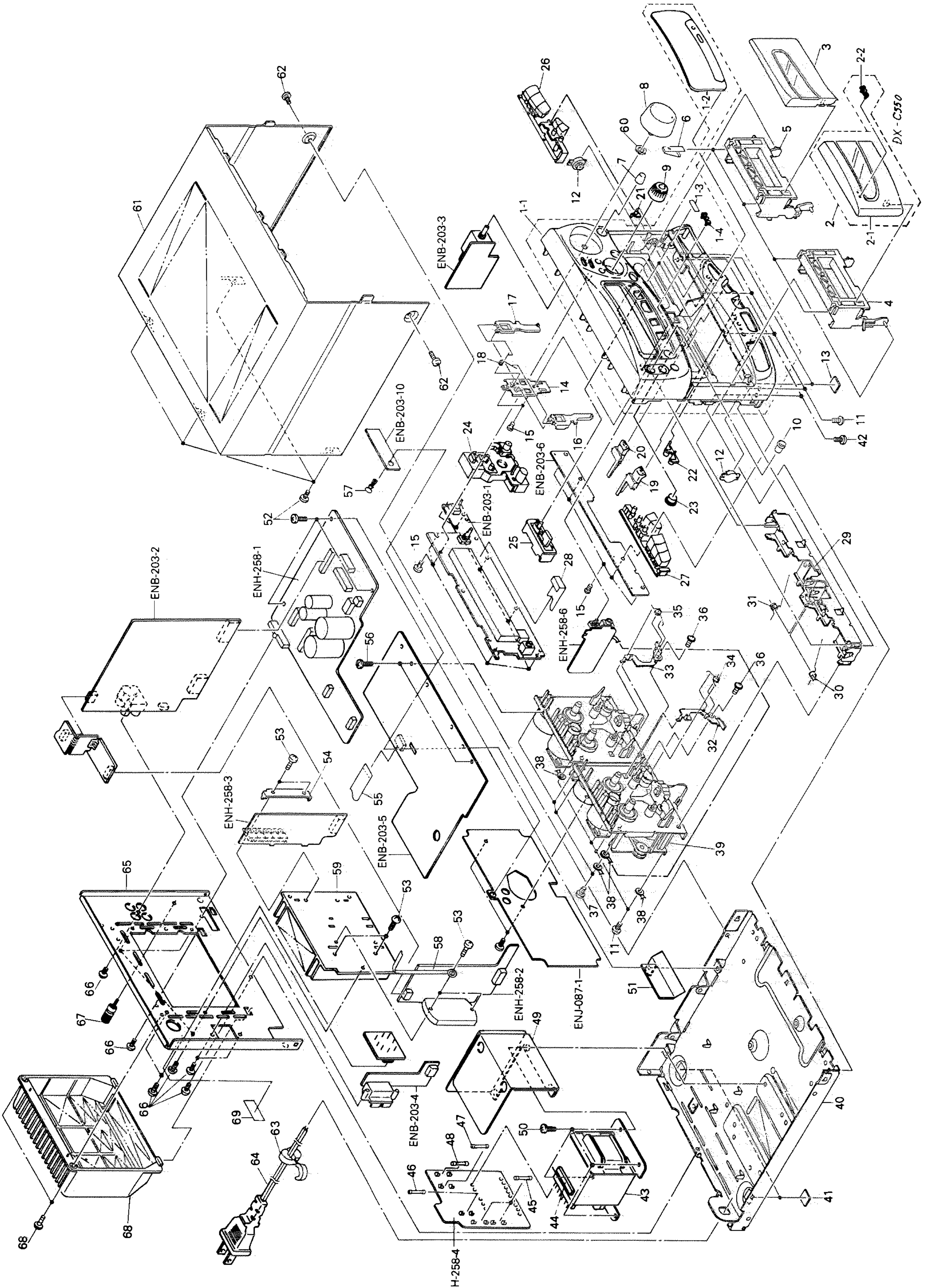
- ■ Grease Point 4-5

Printed Circuit Board Ass'y and Parts List 4-8

- ■ ENH-258 □ Power amp & Power Supply PC Board Ass'y 4-8
- ■ ENB-203 □ Mecha Control, Source Select PC Board Ass'y 4-13
- ■ ENJ-087 □ Cassette amp PC Board Ass'y 4-16

General Exploded View and Parts List

Symbol No. M 1 M M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DX-C550
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ENB-203-1
ENB-203-2
ENB-203-3
ENB-203-4
ENB-203-5
ENB-203-6
ENB-203-10
ENH-258-1
ENH-258-2
ENH-258-3
ENH-258-4
ENH-258-6
ENJ-087-1

Parts List

Symbol No. M 1 M M

⚠	Item	Part Number	Part Name	Q'ty	Description	Area
	1	EFP-DXC550J(S)	FRONT PANEL ASSY	1		C,J
	1	EFP-DXC550U(S)	FRONT PANEL ASSY	1		U,US,UT
	1-1	E102975-006SM	FRONT PANEL	1		U,US,UT
	1-1	E102975-007SM	FRONT PANEL	1		C,J
	1-2	E309277-004SM	WINDOW SCREEN	1	AMP	C,J
	1-3	E69777-003	REFLECTION PLATE	2		
		E309277-005SM	WINDOW SCREEN	1	AMP	U,US,UT
	1-4	E406971-221	JVC MARK	1		
	2	FSJT2003-001SA	CASSETTE LID ASSY	1		
	2-1	FSJT2003-001	CASSETTE LID	1		
	2-2	E406971-221	JVC MARK	1		
	3	FSJT2004-001	CASSETTE LID	1		
	4	E207972-334SM	CASSETTE HOLDER	1	(A)	
	5	E207973-334SM	CASSETTE HOLDER	1	(B)	
	6	E406713-221SS	CASSETE SPRING	4		
	7	E75737-013	BALANCE KNOB	1		
	8	E309083-003SS	VOLUME KNOB	1		
	9	FSXP3016-001	SELECT KNOB	1	MUSIC JOG	
	10	E407233-007	MIC KNOB	1		U,US,UT
	11	SBST3006Z	TAPPING SCREW	10		
	12	E304434-005	DAMPER ASSY	2		
	13	E75896-001	SPACER	2	Front foot	
	14	E308683-002	EJECT GUIDE	1		
	15	SDSF2608Z	SCREW	14		
	16	E308681-002SS	EJECT LEVER	1		
	17	E308682-002SS	EJECT LEVER	1		
	18	E407798-002	SPRING	1		
	19	E309081-002SS	EJECT BUTTON	1		
	20	E309082-002SS	EJECT BUTTON	1		
	21	E408306-001	INDICATOR	1	REC	
	22	E408305-001	INDICATOR	1	DOLBY	
	23	E408733-001SM	REMOTE LENS	1		
	24	E208421-002SM	PUSH BUTTON ASSY	1	POWER	
	25	E309281-001SM	PUSH BUTTON	1		
	26	E208426-004SM	PUSH BUTTON ASSY	1	DECK B	
	27	E208423-004SM	PUSH BUTTON ASSY	1	DECK A	
	28	VWF1225-30TTB	FFC CABLE	1	FC951	
	29	E207974-003SS	HOLDER BRACKET	1		
	30	E408058-001	HOLDER SPRING	1	(A)	
	31	E408122-001	HOLDER SPRING	1	(B)	
	32	E407799-001	EJECT SAFETY	1		
	33	E407800-001	EJECT SAFETY	1		
	34	E407801-002	SPRING	1		
	35	E407802-002	SPRING	1		
	36	SBSF3006Z	TAPPING SCREW	2		
	37	SBSF3008Z	TAPPING SCREW	4		
	38	PU49485-3	WIRE CLAMP	3		J,C
		PU49485-3	WIRE CLAMP	2		U,US,UT
	39	----------------	CASSETTE MECHANISM ASSY	1	See page 4-6	
	40	E102616-226SM	CHASSIS BASE	1		
	41	E75896-006	FELT SPACER	2	Rear foot	
	42	SBST3008M	TAPPING SCREW	2		
⚠	43	ETP1100-57FAJ	POWER TRANSFORMER	1		U,US,UT
⚠		ETP1100-59JAJ	POWER TRANSFORMER	1		C,J
	44	E306805-145	SPACER	1	FS001	

⚠	Item	Part Number	Part Name	Q'ty	Description	Area
⚠	45	QMF0007-1R25J1	FUSE	1	F101,102	C,J
⚠		QMF51E2-1R25	FUSE	2	F101.102	U,US,UT
⚠	46	QMF51E2-1R0	FUSE	1	F002	U,US,UT
⚠	47	QMF0007-2R0J1	FUSE	1	F001	C,J
⚠		QMF51E2-2R0J1	FUSE	1		U,US,UT
⚠	48	QMF51E2-1R0J1	FUSE	1	F003	U,US,UT
	49	E408630-001SM	SHIELD PLATE	1		
	50	E65389-004	SPECIAL SCREW	4		
	51	E408678-001SM	SHIELD PLATE	1		
	52	GBSG3008CC	TAPPING SCREW	7		
	53	SBSG3014CC	SCREW	4		
		SBSG3014CC	SCREW	6		J
	54	E406969-001SM	LEAF SPRING	1		
	55	VWF1216-14TTB	FFC CABLE	1	FC221	
	56	SPST2604Z	TAPPING SCREW	2		
	57	E48729-021	PLASTIC RIVET	1		
	58	EWT021-048	TERMINAL WIRE ASSY	1		
	59	E309285-003SM	HEAT SINK	1		
	60	E71862-003	VOLUME NUT	1		
	61	E207787-010SM	METAL COVER	1		
	62	SDSG3006M	TAPPING SCREW	2		
⚠	63	QHS3876-162	CORD STOPPER	1		
⚠	64	QMP1D00-200H	POWER CORD	1		C,J
⚠		QMP3900-200	POWER CORD	1		US
⚠		QMP7000-200	POWER CORD	1		
⚠		QMP7520-200	POWER CORD	1		U,UT
	65	E208431-023SM	REAR PANEL	1		J
		E208431-024SM	REAR PANEL	1		C
		E208431-025SM	REAR PANEL	1		U,US,UT
	66	E73273-003	SPECIAL SCREW	10		
		E73273-003	SPECIAL SCREW	12		U,US,UT
	67	E408091-001	GND TERMINAL	1		
	68	E207356-001SM	REAR COVER	1		U,US,UT
		E207356-002SM	REAR COVER	1		C,J
	69	E75803-001	CAUTION LABEL	1		J
		E75804-001	CAUTION LABEL	1		C
	-	E309384-006	RATING LABEL	1		UT
	-	E61029-005	NUMBER LABEL	1		
	-	E75139-003	Z LABEL	1		U,UT

⚠ : Safety Parts

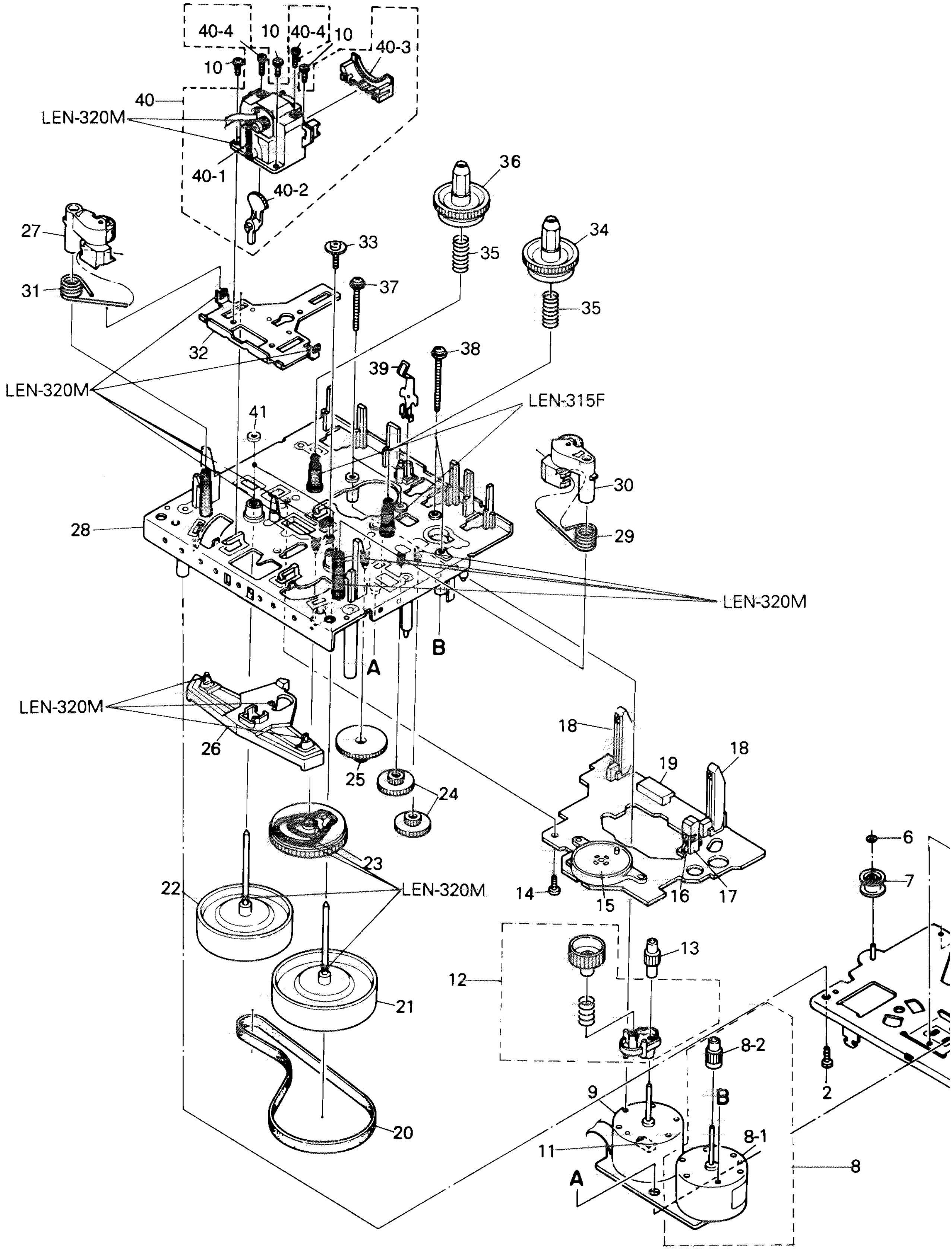
The Marks for Designated Areas

C ..... Canada J .... the U.S.A. U .... Universal Type
US ... Singapore UT ... Taiwan No mark indicates all area.

Cassette Mechanism Ass'y and Parts List

Symbol No. M 2 M M

■ Grease Point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LEN-315F
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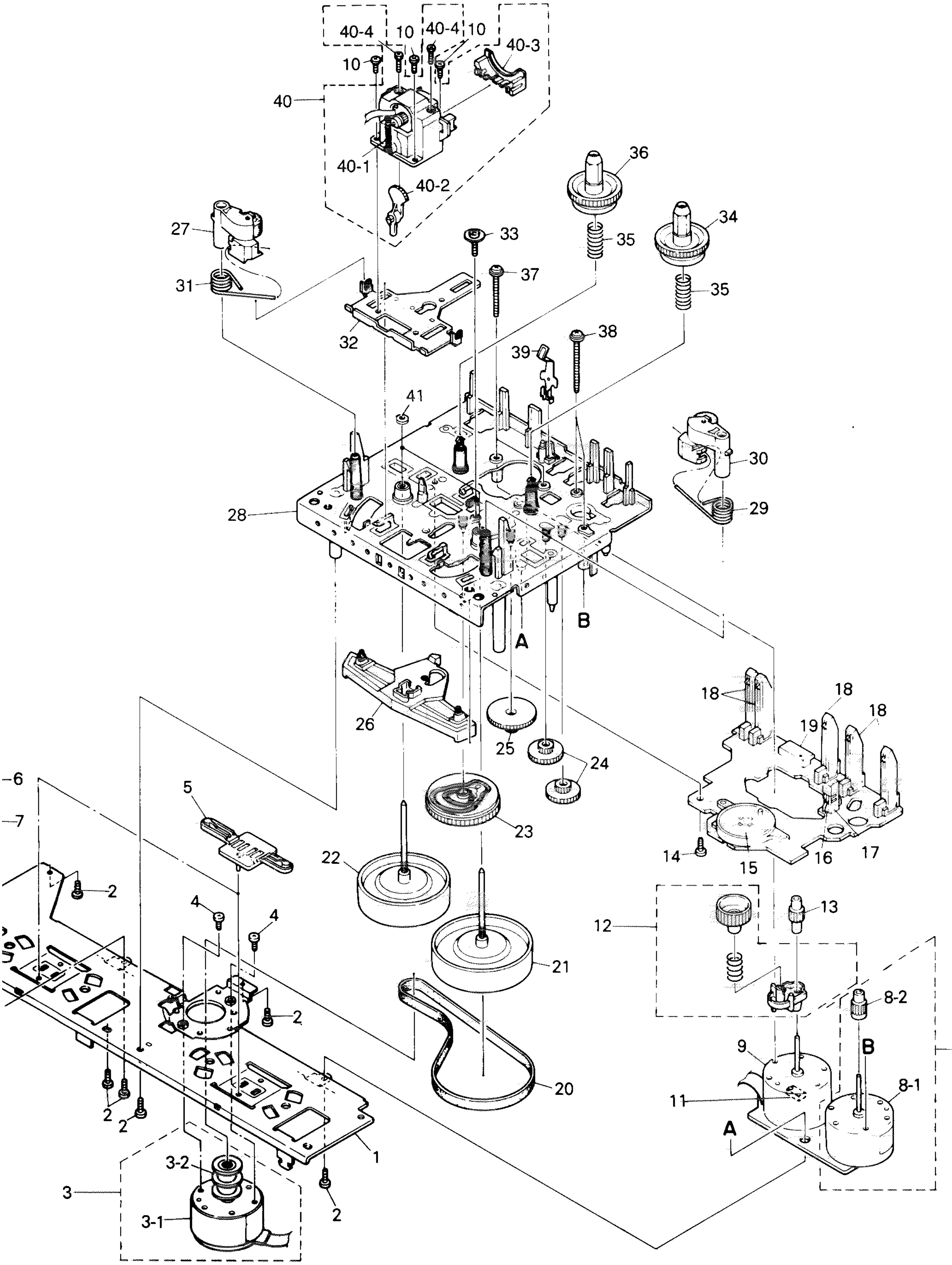
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3-2
3-1

Parts List (Cassette Mechanism Ass'y)

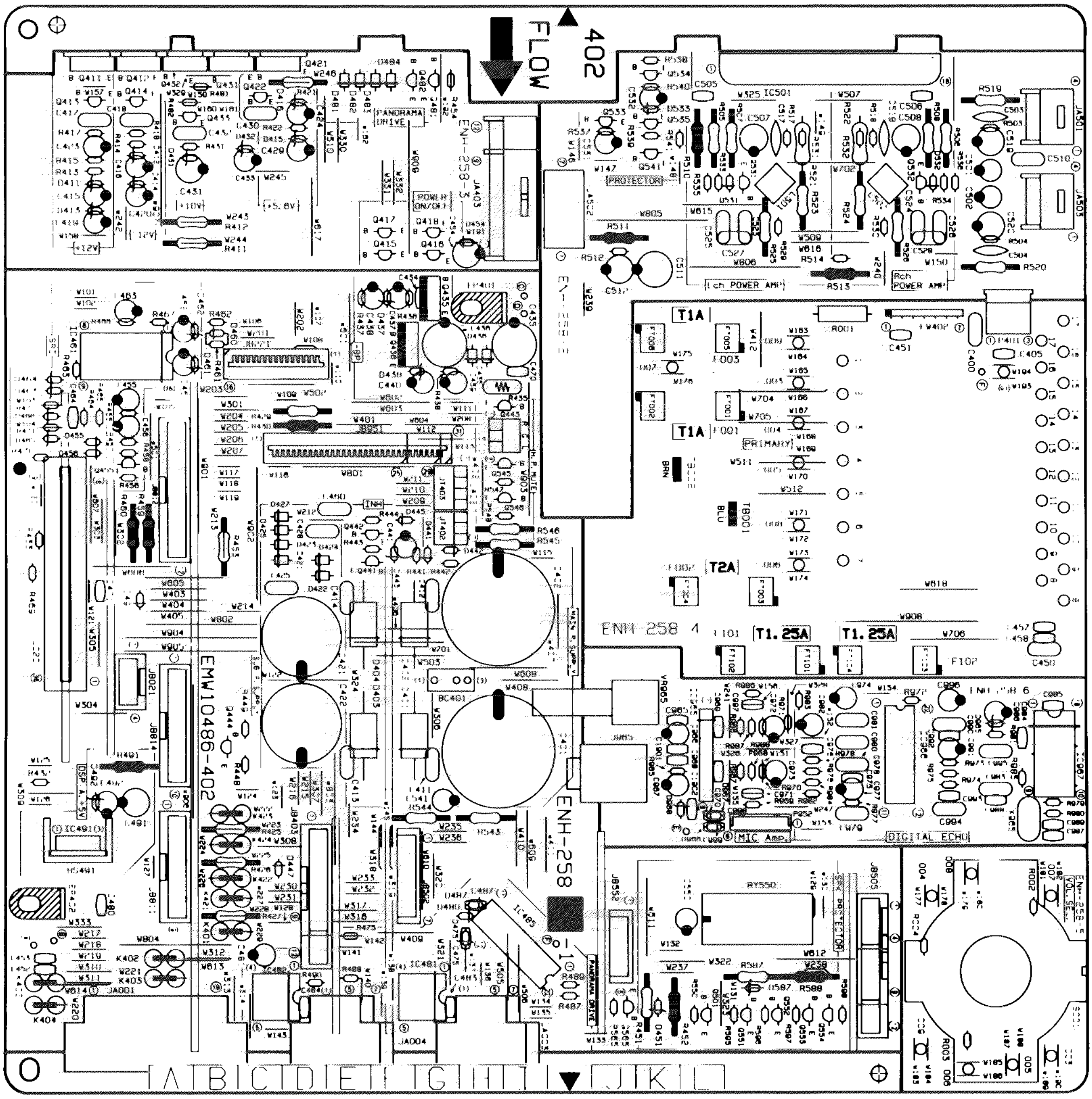
Symbol No. M 2 M M

⚠	Item	Part Number	Part Name	Q'ty	Description	Area
	1	VKM3775-00AMM	FM BRACKET	1		
	2	SDSF2608Z	SCREW	7		
	3	MSI5U2LWA-SA1	DC MOTOR	1		
	3-1	MSI-5U2LWA	DC MOTOR	2		
	3-2	VKR4632-004MM	MOTOR PULLEY	2		
	4	SPSP2603Z	SCREW	2		
	5	VKS5327--005M	PLATE	2		
	6	WDL163525-4	WASHER	1		
	7	VKR4631-005MM	IDLER PULLY	1		
	8	MSN5D257A-SA1	DC MOTOR ASSY	2		
	8-1	MSN-5D257A	DC MOTOR	2		
	8-2	VKS5433-001	ACTUATOR MOTOR GEAR	2		
	9	MMN-6F4RA38	DC MOTOR	2		
	10	SDST2004Z	SCERW	6		
	11	VMC0234-R08	CONNECT TERMINAL	2		
	12	VKS5430-00CMM	F.F/REW.ARM	2		
	13	VKS5432-001	REEL MOTOR GEAR	2		
	14	SDST2612Z	SCREW	1		
	15	VKS3616-00A	CAM SWITCH	1		
	16	DN6851-HI	I.C(M)	1		
	17	VKS3630-001MM	I.C.PROTECTOR	1		
	18	VSH1170-001	LEAF SWITCH	1		
	19	VMC0234-R11	CONNECT TERMINAL	1	A MECHA	
		VMC0234-R14	CONNECT TERMINAL	1	B MECHA	
	20	VKB3001-064	DRIVE BELT	1	AMECHA	
		VKB3001-065	DRIVE BELT	1	B MECHA	
	21	VKF3284-00H	FLY WHEEL	2		
	22	VKF3186-00H	FLY WHEEL	2		
	23	VKS2224-002	CONTROL CAM	2		
	24	VKS5454-001	ACTUATER GEAR	4		
	25	VKS5455-001	ACTUATER GEAR	2		
	26	VKS3627-001	PINCH LEVER	2		
	27	VKP4229-00B	PINCH ROLLER	2		
	28	VKS2229-00C	CHASSIS BASE	2		
	29	VKW5045-003	PINCH ROLLER SPRING	2		
	30	VKP4227-00B	PINCH ROLLER	1		
	31	VKW5046-003	PINCH ROLLER SPRING	2		
	32	VKM3632-001	HEAD BASE	2		
	33	VKZ4708-001	SPECIAL SCREW	2		
	34	VKS5428-00B	REEL DISK	2		
	35	VKW5043-001	TENSION SPRING	4		
	36	VKS3617-002	REEL DISK	3		
	37	VKZ4705-001	SPECIAL SCREW	4		
	38	VKZ4705-002	SPECIAL SCREW	4		
	39	VKY4670-001	SPRING	2		
	40	VKS3626-00E	HEAD MOUNT	1	A MECHA	
		VKS3629-00E	HEAD MOUNT	1	B MECHA	
	40-1	MKW5063-003	HEAD SPRING	2		
	40-2	VKS3614-001	TURN GEAR	2	A MECHA	
	40-3	VKS3654-001	HEAD MOUNT COVER	2		
	40-4	VKZ4629-003	SCREW	4		

Printed Circuit Board Ass'y and Parts List

■ ENH-258 ☐ Power amp & Power Supply PC Board Ass'y

Note : ENH-258 ☐ varies according to the areas employd. See note (1) when placing an order.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ENH-258 6
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PROTECTOR
Lch POWER AMP
Rch POWER AMP
IC501
T1A
T2A
PRIMARY
T1.25A
MIC Amp.
DIGITAL ECHO
RY550
SPK PROTECTOR
DSP A +5V
IC491
IC481
IC485
JA001
JA004
JA501
JA502
+12V
+10V
+5.6V
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Note (1)

PC Board Ass'y	Version	Dasignated Areas
ENH-258 A	J	the U.S.A.
ENH-258 B	C	Canada
ENH-258 C	U US UT	Universal Type Singapore Taiwan
ENH-258 D	UP	Korea

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	Q411	2SD2061(F,G)	SI.TRANSIST ROHM	
	Q412	2SB1187(F,G)	SI.TRANSIST ROHM	
	Q413	2SC1740S(R,S)	SI.TRANSIST ROHM	
	Q414	2SA933S(RS)	SI.TRANSIST	
	Q415	DTC144ES	DIGITAL TRA ROHM	
	Q416	DTA144ES	DIGITAL TRA ROHM	
	Q417	DTA144ES	DIGITAL TRA ROHM	
	Q418	DTC144ES	DIGITAL TRA ROHM	
	Q421	2SD2061(F,G)	SI.TRANSIST ROHM	
	Q422	2SC1740S(R,S)	SI.TRANSIST ROHM	
	Q431	2SD2061(F,G)	SI.TRANSIST ROHM	
	Q433	2SC1740S(R,S)	SI.TRANSIST ROHM	
	Q435	2SB1357(E,F)	SI.TRANSIST ROHM	
	Q436	2SD2037(E,F)	SI.TRANSIST ROHM	
	Q441	DTC114ES	DIGITAL TRA ROHM	

⚠ : SAFETY PARTS

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	Q442	DTC114YS	DIGITAL TRA ROHM	
	Q443	DTA114TS	DIGITAL TRA ROHM	
	Q444	DTA144WS	DIGITAL TRA ROHM	
	Q455	2SC1740S(R,S)	SI.TRANSIST ROHM	
	Q501	2SC1740S(R,S)	SI.TRANSIST ROHM	
	Q531	2SA933S(RS)	SI.TRANSIST	
	Q532	2SA933S(RS)	SI.TRANSIST	
	Q533	2SC1740S(R,S)	SI.TRANSIST ROHM	
	Q534	2SA733A(P,K)	SI.TRANSIST NEC	
	Q535	2SC1740S(R,S)	SI.TRANSIST ROHM	
	Q541	DTC144ES	DIGITAL TRA ROHM	
	Q545	2SD2144S(VW)	SI.TRANSIST ROHM	
	Q546	2SD2144S(VW)	SI.TRANSIST ROHM	

⚠ : SAFETY PARTS

I.C.s

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	IC461	XR1099CP	I.C(MONO-AN EXAR JAPAN	
	IC501	STK4141MK5	I.C(HYBRID) SANYO	U
	IC501	STK4141MK5	I.C(HYBRID) SANYO	UP
	IC501	STK4141MK5	I.C(HYBRID) SANYO	US
	IC501	STK4141MK5	I.C(HYBRID) SANYO	UT
	IC501	STK4161MK5V	I.C(HYBRID) SANYO	C
	IC501	STK4161MK5V	I.C(HYBRID) SANYO	J
	IC965	BA15218N	I.C(MONO-AN ROHM	U
	IC965	BA15218N	I.C(MONO-AN ROHM	UP
	IC965	BA15218N	I.C(MONO-AN ROHM	US
	IC965	BA15218N	I.C(MONO-AN ROHM	UT
	IC966	BA7725S	I.C(MONO-AN ROHM	U
	IC966	BA7725S	I.C(MONO-AN ROHM	UP
	IC966	BA7725S	I.C(MONO-AN ROHM	US
	IC966	BA7725S	I.C(MONO-AN ROHM	UT
	IC967	BU9251S	I.C(M) ROHM	U
	IC967	BU9251S	I.C(M) ROHM	UP
	IC967	BU9251S	I.C(M) ROHM	US
	IC967	BU9251S	I.C(M) ROHM	UT

⚠ : SAFETY PARTS

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	D401	S3V20F	SI.DIODE SINDENGEN	C
	D401	S3V20F	SI.DIODE SINDENGEN	J
⚠	D401	30DL2FC	SI.DIODE NIHONINTER	U
⚠	D401	30DL2FC	SI.DIODE NIHONINTER	UP
⚠	D401	30DL2FC	SI.DIODE NIHONINTER	US
⚠	D401	30DL2FC	SI.DIODE NIHONINTER	UT
	D402	S3V20F	SI.DIODE SINDENGEN	C
	D402	S3V20F	SI.DIODE SINDENGEN	J
⚠	D402	30DL2FC	SI.DIODE NIHONINTER	U
⚠	D402	30DL2FC	SI.DIODE NIHONINTER	UP
⚠	D402	30DL2FC	SI.DIODE NIHONINTER	US
⚠	D402	30DL2FC	SI.DIODE NIHONINTER	UT
	D403	S3V20F	SI.DIODE SINDENGEN	C
	D403	S3V20F	SI.DIODE SINDENGEN	J
⚠	D403	30DL2FC	SI.DIODE NIHONINTER	U
⚠	D403	30DL2FC	SI.DIODE NIHONINTER	UP
⚠	D403	30DL2FC	SI.DIODE NIHONINTER	US
⚠	D403	30DL2FC	SI.DIODE NIHONINTER	UT
	D404	S3V20F	SI.DIODE SINDENGEN	C
	D404	S3V20F	SI.DIODE SINDENGEN	J
⚠	D404	30DL2FC	SI.DIODE NIHONINTER	U
⚠	D404	30DL2FC	SI.DIODE NIHONINTER	UP
⚠	D404	30DL2FC	SI.DIODE NIHONINTER	US
⚠	D404	30DL2FC	SI.DIODE NIHONINTER	UT
	D411	MTZ13JC	ZENER DIODE ROHM	
	D412	MTZ13JC	ZENER DIODE ROHM	
	D413	MTZ13JC	ZENER DIODE ROHM	
	D414	MTZ13JC	ZENER DIODE ROHM	
	D415	RD6.8JSB3	ZENER DIODE NEC	
	D416	MTZ6.8JC	ZENER DIODE ROHM	
	D421	1SR139-200	SI.DIODE ROHM	
	D422	1SR139-200	SI.DIODE ROHM	
	D423	1SR139-200	SI.DIODE ROHM	
	D424	1SR139-200	SI.DIODE ROHM	
	D425	1SR139-200	SI.DIODE ROHM	
	D427	1SR139-200	SI.DIODE ROHM	
	D431	MTZ11JC	ZENER DIODE ROHM	
	D432	MTZ12JC	ZENER DIODE ROHM	
	D435	1SR139-200	SI.DIODE ROHM	
	D436	1SR139-200	SI.DIODE ROHM	
	D437	MTZ30JC	ZENER DIODE ROHM	
	D438	MTZ6.2JC	ZENER DIODE ROHM	
	D441	1SS119	SI.DIODE	
	D442	1SS119	SI.DIODE	
	D443	MTZ5.1JC	ZENER DIODE ROHM	

⚠ : SAFETY PARTS

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	D445	1SS119	SI.DIODE	
	D447	1SS119	SI.DIODE	
	D451	MTZ6.8JC	ZENER DIODE ROHM	U
	D451	MTZ6.8JC	ZENER DIODE ROHM	UP
	D451	MTZ6.8JC	ZENER DIODE ROHM	US
	D451	MTZ6.8JC	ZENER DIODE ROHM	UT
	D455	1SS119	SI.DIODE	
	D456	1SS119	SI.DIODE	
	D461	MTZ5.1JB	ZENER DIODE ROHM	
	D462	MTZ5.1JB	ZENER DIODE ROHM	
	D463	MTZ6.8JC	ZENER DIODE ROHM	
	D464	MTZ6.8JC	ZENER DIODE ROHM	
	D531	1SS119	SI.DIODE	
	D532	1SS119	SI.DIODE	
	D533	1SS119	SI.DIODE	
	D965	MTZ5.1JC	ZENER DIODE ROHM	U
	D965	MTZ5.1JC	ZENER DIODE ROHM	UP
	D965	MTZ5.1JC	ZENER DIODE ROHM	US
	D965	MTZ5.1JC	ZENER DIODE ROHM	UT

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	C400	QFV82AJ-104	0.1MF 100V THIN FILM	
	C401	EEW4208-568E	5600MF E.CAPACITO	
	C402	EEW4208-568E	5600MF E.CAPACITO	
	C412	QFLB1HJ-223	0.022MF 50V MYLAR CAPA	
	C413	QFLB1HJ-223	0.022MF 50V MYLAR CAPA	
	C415	QETB1CM-226	22MF 16V E.CAPACITO	
	C416	QETB1CM-226	22MF 16V E.CAPACITO	
	C417	QFLB1HJ-103	0.01MF 50V MYLAR CAPA	
	C418	QFLB1HJ-103	0.01MF 50V MYLAR CAPA	
	C419	QETB1CM-226	22MF 16V E.CAPACITO	
	C420	QETB1CM-226	22MF 16V E.CAPACITO	
	C421	QETB1VM-338	3300MF 35V AL E.CAPAC	
	C422	QETB1VM-338	3300MF 35V AL E.CAPAC	
	C423	QETB1EM-226N	22MF 25V E.CAPACITO	
	C424	QETB1AM-476	47MF 10V E.CAPACITO	
	C425	QFLB1HJ-223	0.022MF 50V MYLAR CAPA	
	C428	QFLB1HJ-223	0.022MF 50V MYLAR CAPA	
	C429	QETB1AM-476	47MF 10V E.CAPACITO	
	C430	QFLB1HJ-103	0.01MF 50V MYLAR CAPA	
	C431	QETB1CM-226	22MF 16V E.CAPACITO	
	C432	QFLB1HJ-103	0.01MF 50V MYLAR CAPA	
	C433	QETB1CM-226	22MF 16V E.CAPACITO	
	C435	QETB1HM-227	220MF 50V E.CAPACITO	
	C436	QETB1HM-107	100MF 50V E.CAPACITO	
	C437	QETB1HM-226E	22MF 50V E.CAPACITO	
	C438	QETB1HM-226E	22MF 50V E.CAPACITO	
	C439	QETB1HM-475E	4.7MF 50V E.CAPACITO	
	C440	QETB1HM-475E	4.7MF 50V E.CAPACITO	
	C441	QETB1HM-225	2.2MF 50V AL E.CAPAC	
	C455	QETB1HM-105	1MF 50V AL E.CAPAC	
	C456	QETB1HM-105	1MF 50V AL E.CAPAC	
	C460	QFV82AJ-104	0.1MF 100V THIN FILM	
	C461	QETB1AM-107	100MF 10V AL E.CAPAC	
	C462	QETB1AM-107	100MF 10V AL E.CAPAC	
	C463	QETB1AM-476	47MF 10V E.CAPACITO	
	C464	QCBB1HK-102Y	1000PF 50V CER.CAPACI	
	C501	EET5010-225ZE	2.2MF E.CAPACITO	
	C502	EET5010-225ZE	2.2MF E.CAPACITO	
	C503	QCS21HJ-470	47PF 50V CER.CAPACI	
	C504	QCS21HJ-470	47PF 50V CER.CAPACI	
	C505	QCBB1HK-471Y	470PF 50V CER.CAPACI	
	C506	QCBB1HK-471Y	470PF 50V CER.CAPACI	
	C507	QETB1HM-226E	22MF 50V E.CAPACITO	
	C508	QETB1HM-226E	22MF 50V E.CAPACITO	
	C510	QFLB1HJ-223	0.022MF 50V MYLAR CAPA	
	C511	QETB1HM-107	100MF 50V E.CAPACITO	
	C512	QETB1HM-106	10MF 50V E.CAPACITO	
	C517	QCS21HJ-100	10PF 50V CER.CAPACI	
	C518	QCS21HJ-100	10PF 50V CER.CAPACI	
	C519	EET5010-226ZE	22MF E.CAPACITO	
	C520	EET5010-226ZE	22MF E.CAPACITO	
	C523	QFV81HJ-104	0.1MF 50V THIN FILM	C
	C523	QFV81HJ-104	0.1MF 50V THIN FILM	U
	C523	QFV81HJ-104	0.1MF 50V THIN FILM	UP
	C523	QFV81HJ-104	0.1MF 50V THIN FILM	US
	C523	QFV81HJ-104	0.1MF 50V THIN FILM	UT
	C524	QFV81HJ-104	0.1MF 50V THIN FILM	C
	C524	QFV81HJ-104	0.1MF 50V THIN FILM	U
	C524	QFV81HJ-104	0.1MF 50V THIN FILM	UP
	C524	QFV81HJ-104	0.1MF 50V THIN FILM	US
	C524	QFV81HJ-104	0.1MF 50V THIN FILM	UT
	C525	QFV81HJ-104	0.1MF 50V THIN FILM	C
	C525	QFV81HJ-104	0.1MF 50V THIN FILM	U
	C525	QFV81HJ-104	0.1MF 50V THIN FILM	UP
	C525	QFV81HJ-104	0.1MF 50V THIN FILM	US

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	C525	QFV81HJ-104	0.1MF 50V THIN FILM	UT
	C526	QFV81HJ-104	0.1MF 50V THIN FILM	C
	C526	QFV81HJ-104	0.1MF 50V THIN FILM	U
	C526	QFV81HJ-104	0.1MF 50V THIN FILM	UP
	C526	QFV81HJ-104	0.1MF 50V THIN FILM	US
	C526	QFV81HJ-104	0.1MF 50V THIN FILM	UT
	C527	QFLB1HJ-473	0.047MF 50V MYLAR CAPA	J
	C528	QFLB1HJ-473	0.047MF 50V MYLAR CAPA	J
	C531	QETB1EM-106	10MF 25V AL E.CAPAC	
	C532	QETB1CM-476	47MF 16V AL E.CAPAC	
	C541	QETB1HM-106	10MF 50V E.CAPACITO	
	C550	QETB1HM-105	1MF 50V AL E.CAPAC	
	C965	QCVB1CM-103Y	0.01MF 16V CER.CAPACI	U
	C965	QCVB1CM-103Y	0.01MF 16V CER.CAPACI	UP
	C965	QCVB1CM-103Y	0.01MF 16V CER.CAPACI	US
	C965	QCVB1CM-103Y	0.01MF 16V CER.CAPACI	UT
	C966	QETB1EM-106	10MF 25V AL E.CAPAC	U
	C966	QETB1EM-106	10MF 25V AL E.CAPAC	UP
	C966	QETB1EM-106	10MF 25V AL E.CAPAC	US
	C966	QETB1EM-106	10MF 25V AL E.CAPAC	UT
	C967	QETB1EM-106	10MF 25V AL E.CAPAC	U
	C967	QETB1EM-106	10MF 25V AL E.CAPAC	UP
	C967	QETB1EM-106	10MF 25V AL E.CAPAC	US
	C967	QETB1EM-106	10MF 25V AL E.CAPAC	UT
	C968	QCBB1HK-102Y	1000PF 50V CER.CAPACI	U
	C968	QCBB1HK-102Y	1000PF 50V CER.CAPACI	UP
	C968	QCBB1HK-102Y	1000PF 50V CER.CAPACI	US
	C968	QCBB1HK-102Y	1000PF 50V CER.CAPACI	UT
	C969	QCBB1HK-101Y	100PF 50V CER.CAPACI	U
	C969	QCBB1HK-101Y	100PF 50V CER.CAPACI	UP
	C969	QCBB1HK-101Y	100PF 50V CER.CAPACI	US
	C969	QCBB1HK-101Y	100PF 50V CER.CAPACI	UT
	C970	QCBB1HK-101Y	100PF 50V CER.CAPACI	U
	C970	QCBB1HK-101Y	100PF 50V CER.CAPACI	UP
	C970	QCBB1HK-101Y	100PF 50V CER.CAPACI	US
	C970	QCBB1HK-101Y	100PF 50V CER.CAPACI	UT
	C972	QETB1EM-106	10MF 25V AL E.CAPAC	U
	C972	QETB1EM-106	10MF 25V AL E.CAPAC	UP
	C972	QETB1EM-106	10MF 25V AL E.CAPAC	US
	C972	QETB1EM-106	10MF 25V AL E.CAPAC	UT
	C973	QETB1EM-106	10MF 25V AL E.CAPAC	U
	C973	QETB1EM-106	10MF 25V AL E.CAPAC	UP
	C973	QETB1EM-106	10MF 25V AL E.CAPAC	US
	C973	QETB1EM-106	10MF 25V AL E.CAPAC	UT
	C974	QETB1CM-476	47MF 16V AL E.CAPAC	U
	C974	QETB1CM-476	47MF 16V AL E.CAPAC	UP
	C974	QETB1CM-476	47MF 16V AL E.CAPAC	US
	C974	QETB1CM-476	47MF 16V AL E.CAPAC	UT
	C975	QCXB1CM-222Y	2200PF 16V CER.CAPACI	U
	C975	QCXB1CM-222Y	2200PF 16V CER.CAPACI	UP
	C975	QCXB1CM-222Y	2200PF 16V CER.CAPACI	US
	C975	QCXB1CM-222Y	2200PF 16V CER.CAPACI	UT
	C976	QCVB1CM-103Y	0.01MF 16V CER.CAPACI	U
	C976	QCVB1CM-103Y	0.01MF 16V CER.CAPACI	UP
	C976	QCVB1CM-103Y	0.01MF 16V CER.CAPACI	US
	C976	QCVB1CM-103Y	0.01MF 16V CER.CAPACI	UT
	C977	QETB1HM-474	0.47MF 50V ELECTRO	U
	C977	QETB1HM-474	0.47MF 50V ELECTRO	UP
	C977	QETB1HM-474	0.47MF 50V ELECTRO	US
	C977	QETB1HM-474	0.47MF 50V ELECTRO	UT
	C978	QFLB1HJ-104	0.1MF 50V MYLAR CAPA	U
	C978	QFLB1HJ-104	0.1MF 50V MYLAR CAPA	UP
	C978	QFLB1HJ-104	0.1MF 50V MYLAR CAPA	US
	C978	QFLB1HJ-104	0.1MF 50V MYLAR CAPA	UT
	C979	QFLB1HJ-333	0.033MF 50V MYLAR CAPA	U
	C979	QFLB1HJ-333	0.033MF 50V MYLAR CAPA	UP
	C979	QFLB1HJ-333	0.033MF 50V MYLAR CAPA	US
	C979	QFLB1HJ-333	0.033MF 50V MYLAR CAPA	UT
	C980	QFLB1HJ-104	0.1MF 50V MYLAR CAPA	U
	C980	QFLB1HJ-104	0.1MF 50V MYLAR CAPA	UP
	C980	QFLB1HJ-104	0.1MF 50V MYLAR CAPA	US
	C980	QFLB1HJ-104	0.1MF 50V MYLAR CAPA	UT
	C981	QFLB1HJ-104	0.1MF 50V MYLAR CAPA	U
	C981	QFLB1HJ-104	0.1MF 50V MYLAR CAPA	UP
	C981	QFLB1HJ-104	0.1MF 50V MYLAR CAPA	US
	C981	QFLB1HJ-104	0.1MF 50V MYLAR CAPA	UT
	C982	QETB1HM-105	1MF 50V AL E.CAPAC	U
	C982	QETB1HM-105	1MF 50V AL E.CAPAC	UP
	C982	QETB1HM-105	1MF 50V AL E.CAPAC	US
	C982	QETB1HM-105	1MF 50V AL E.CAPAC	UT
	C983	QFLB1HJ-104	0.1MF 50V MYLAR CAPA	U
	C983	QFLB1HJ-104	0.1MF 50V MYLAR CAPA	UP
	C983	QFLB1HJ-104	0.1MF 50V MYLAR CAPA	US
	C983	QFLB1HJ-104	0.1MF 50V MYLAR CAPA	UT
	C984	QCBB1HK-221Y	220PF 50V CER.CAPACI	U
	C984	QCBB1HK-221Y	220PF 50V CER.CAPACI	UP
	C984	QCBB1HK-221Y	220PF 50V CER.CAPACI	US
	C984	QCBB1HK-221Y	220PF 50V CER.CAPACI	UT
	C985	QCVB1CM-103Y	0.01MF 16V CER.CAPACI	U
	C985	QCVB1CM-103Y	0.01MF 16V CER.CAPACI	UP
	C985	QCVB1CM-103Y	0.01MF 16V CER.CAPACI	US
	C985	QCVB1CM-103Y	0.01MF 16V CER.CAPACI	UT
	C986	QETB1CM-107	100MF 16V AL E.CAPAC	U
	C986	QETB1CM-107	100MF 16V AL E.CAPAC	UP
	C986	QETB1CM-107	100MF 16V AL E.CAPAC	US

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	C986	QETB1CM-107	100MF 16V AL E.CAPAC	UT
	C987	QCBB1HK-221Y	220PF 50V CER.CAPACI	U
	C987	QCBB1HK-221Y	220PF 50V CER.CAPACI	UP
	C987	QCBB1HK-221Y	220PF 50V CER.CAPACI	US
	C987	QCBB1HK-221Y	220PF 50V CER.CAPACI	UT
	C988	QCVB1CM-103Y	0.01MF 16V CER.CAPACI	U
	C988	QCVB1CM-103Y	0.01MF 16V CER.CAPACI	UP
	C988	QCVB1CM-103Y	0.01MF 16V CER.CAPACI	US
	C988	QCVB1CM-103Y	0.01MF 16V CER.CAPACI	UT
	C989	QCBB1HK-221Y	220PF 50V CER.CAPACI	U
	C989	QCBB1HK-221Y	220PF 50V CER.CAPACI	UP
	C989	QCBB1HK-221Y	220PF 50V CER.CAPACI	US
	C989	QCBB1HK-221Y	220PF 50V CER.CAPACI	UT
	C990	QFLB1HJ-104	0.1MF 50V MYLAR CAPA	U
	C990	QFLB1HJ-104	0.1MF 50V MYLAR CAPA	UP
	C990	QFLB1HJ-104	0.1MF 50V MYLAR CAPA	US
	C990	QFLB1HJ-104	0.1MF 50V MYLAR CAPA	UT
	C991	QETB1HM-474	0.47MF 50V ELECTRO	U
	C991	QETB1HM-474	0.47MF 50V ELECTRO	UP
	C991	QETB1HM-474	0.47MF 50V ELECTRO	US
	C991	QETB1HM-474	0.47MF 50V ELECTRO	UT
	C992	QCXB1CM-562Y	5600PF 16V CER.CAPACI	U
	C992	QCXB1CM-562Y	5600PF 16V CER.CAPACI	UP
	C992	QCXB1CM-562Y	5600PF 16V CER.CAPACI	US
	C992	QCXB1CM-562Y	5600PF 16V CER.CAPACI	UT
	C993	QCBB1HK-821Y	820PF 50V CER.CAPACI	U
	C993	QCBB1HK-821Y	820PF 50V CER.CAPACI	UP
	C993	QCBB1HK-821Y	820PF 50V CER.CAPACI	US
	C993	QCBB1HK-821Y	820PF 50V CER.CAPACI	UT
	C994	QFLB1HJ-183	0.018MF 50V MYLAR CAPA	U
	C994	QFLB1HJ-183	0.018MF 50V MYLAR CAPA	UP
	C994	QFLB1HJ-183	0.018MF 50V MYLAR CAPA	US
	C994	QFLB1HJ-183	0.018MF 50V MYLAR CAPA	UT
	C995	QFLB1HJ-104	0.1MF 50V MYLAR CAPA	U
	C995	QFLB1HJ-104	0.1MF 50V MYLAR CAPA	UP
	C995	QFLB1HJ-104	0.1MF 50V MYLAR CAPA	US
	C995	QFLB1HJ-104	0.1MF 50V MYLAR CAPA	UT
	C996	QETB1CM-226	22MF 16V E.CAPACITO	U
	C996	QETB1CM-226	22MF 16V E.CAPACITO	UP
	C996	QETB1CM-226	22MF 16V E.CAPACITO	US
	C996	QETB1CM-226	22MF 16V E.CAPACITO	UT
	C997	QCSB1HJ-470	47PF 50V CER.CAPACI	U
	C997	QCSB1HJ-470	47PF 50V CER.CAPACI	UP
	C997	QCSB1HJ-470	47PF 50V CER.CAPACI	US
	C997	QCSB1HJ-470	47PF 50V CER.CAPACI	UT
	C1902	QCFB1HZ-104Y	0.1MF 50V CER.CAPACI	U
	C1902	QCFB1HZ-104Y	0.1MF 50V CER.CAPACI	UP
	C1902	QCFB1HZ-104Y	0.1MF 50V CER.CAPACI	US
	C1902	QCFB1HZ-104Y	0.1MF 50V CER.CAPACI	UT

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
⚠	R001	QRC128K-275EM	2.7M 1/2W COMPOSITIO	C
⚠	R001	QRC128K-275EM	2.7M 1/2W COMPOSITIO	J
	R002	QRD161J-105	1M 1/6W CARBON RES	U
	R002	QRD161J-105	1M 1/6W CARBON RES	US
	R002	QRD161J-105	1M 1/6W CARBON RES	UT
	R003	QRD161J-105	1M 1/6W CARBON RES	U
	R003	QRD161J-105	1M 1/6W CARBON RES	US
	R003	QRD161J-105	1M 1/6W CARBON RES	UT
	R004	QRD161J-105	1M 1/6W CARBON RES	U
	R004	QRD161J-105	1M 1/6W CARBON RES	US
	R004	QRD161J-105	1M 1/6W CARBON RES	UT
⚠	R411	QRD14CJ-2R2SX	2.2 1/4W UNF.CARBON	C
⚠	R411	QRD14CJ-2R2SX	2.2 1/4W UNF.CARBON	J
⚠	R412	QRD14CJ-5R6SX	5.6 1/4W UNF.CARBON	C
⚠	R412	QRD14CJ-5R6SX	5.6 1/4W UNF.CARBON	J
	R413	QRD167J-153	15K 1/6W CARBON RES	
	R414	QRD167J-153	15K 1/6W CARBON RES	
	R415	QRD167J-152	1.5K 1/6W CARBON RES	
	R417	QRD167J-152	1.5K 1/6W CARBON RES	
	R418	QRD161J-222	2.2K 1/6W CARBON RES	
⚠	R421	QRD14CJ-1R0SX	1 1/4W UNF.CARBON	C
⚠	R421	QRD14CJ-1R0SX	1 1/4W UNF.CARBON	J
	R422	QRD161J-222	2.2K 1/6W CARBON RES	
⚠	R425	QRD14CJ-3R9S	3.9 1/4W UNF.CARBON	C
⚠	R425	QRD14CJ-3R9S	3.9 1/4W UNF.CARBON	J
⚠	R426	QRD14CJ-3R9S	3.9 1/4W UNF.CARBON	C
⚠	R426	QRD14CJ-3R9S	3.9 1/4W UNF.CARBON	J
⚠	R429	QRD14CJ-2R2SX	2.2 1/4W UNF.CARBON	U
⚠	R429	QRD14CJ-2R2SX	2.2 1/4W UNF.CARBON	UP
⚠	R429	QRD14CJ-2R2SX	2.2 1/4W UNF.CARBON	US
⚠	R429	QRD14CJ-2R2SX	2.2 1/4W UNF.CARBON	UT
⚠	R429	QRD14CJ-5R6SX	5.6 1/4W UNF.CARBON	C
⚠	R429	QRD14CJ-5R6SX	5.6 1/4W UNF.CARBON	J
⚠	R430	QRD14CJ-5R6SX	5.6 1/4W UNF.CARBON	C
⚠	R430	QRD14CJ-5R6SX	5.6 1/4W UNF.CARBON	J

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R430	QRZ0077-5R6X	5.6	1/4W	FUSIBLE RE	U
	R430	QRZ0077-5R6X	5.6	1/4W	FUSIBLE RE	UP
	R430	QRZ0077-5R6X	5.6	1/4W	FUSIBLE RE	US
	R430	QRZ0077-5R6X	5.6	1/4W	FUSIBLE RE	UT
	R431	QRD161J-222	2.2K	1/6W	CARBON RES	
	R432	QRD161J-102	1K	1/6W	CARBON RES	
	R433	QRD161J-221	220	1/6W	CARBON RES	
⚠	R435	PTH61G25AR4R7M			POSITIVE T	
	R436	QRD167J-332	3.3K	1/6W	CARBON RES	
	R437	QRD167J-223	22K	1/6W	CARBON RES	
	R438	QRD161J-104	100K	1/6W	CARBON RES	
	R441	QRD161J-103	10K	1/6W	CARBON RES	
	R442	QRD161J-103	10K	1/6W	CARBON RES	
	R443	QRD161J-103	10K	1/6W	CARBON RES	
	R444	QRD161J-102	1K	1/6W	CARBON RES	
	R448	QRD161J-103	10K	1/6W	CARBON RES	
	R449	QRD161J-222	2.2K	1/6W	CARBON RES	
⚠	R451	QRD14CJ-271S	270	1/4W	UNF.CARBON	U
⚠	R451	QRD14CJ-271S	270	1/4W	UNF.CARBON	UP
⚠	R451	QRD14CJ-271S	270	1/4W	UNF.CARBON	US
⚠	R451	QRD14CJ-271S	270	1/4W	UNF.CARBON	UT
	R451	QRD14CJ-331SX	330	1/4W	UNF.CARBON	C
	R451	QRD14CJ-331SX	330	1/4W	UNF.CARBON	J
⚠	R452	QRD14CJ-471SX	470	1/4W	UNF.CARBON	C
⚠	R452	QRD14CJ-471SX	470	1/4W	UNF.CARBON	J
⚠	R452	QRZ0077-271	270	1/4W	FUSIBLE RE	U
⚠	R452	QRZ0077-271	270	1/4W	FUSIBLE RE	UP
⚠	R452	QRZ0077-271	270	1/4W	FUSIBLE RE	US
⚠	R452	QRZ0077-271	270	1/4W	FUSIBLE RE	UT
⚠	R453	QRD14CJ-4R7S	4.7	1/4W	UNF.CARBON	C
⚠	R453	QRD14CJ-4R7S	4.7	1/4W	UNF.CARBON	J
	R455	QRD167J-562	5.6K	1/6W	CARBON RES	
	R456	QRD161J-103	10K	1/6W	CARBON RES	
	R457	QRD161J-222	2.2K	1/6W	CARBON RES	
	R458	QRD161J-104	100K	1/6W	CARBON RES	
⚠	R459	QRD14CJ-100SX	10	1/4W	UNF.CARBON	C
⚠	R459	QRD14CJ-100SX	10	1/4W	UNF.CARBON	J
⚠	R459	QRZ0077-100	10	1/4W	FUSIBLE RE	U
⚠	R459	QRZ0077-100	10	1/4W	FUSIBLE RE	UP
⚠	R459	QRZ0077-100	10	1/4W	FUSIBLE RE	US
⚠	R459	QRZ0077-100	10	1/4W	FUSIBLE RE	UT
⚠	R460	QRD14CJ-100SX	10	1/4W	UNF.CARBON	C
⚠	R460	QRD14CJ-100SX	10	1/4W	UNF.CARBON	J
⚠	R460	QRZ0077-100	10	1/4W	FUSIBLE RE	U
⚠	R460	QRZ0077-100	10	1/4W	FUSIBLE RE	UP
⚠	R460	QRZ0077-100	10	1/4W	FUSIBLE RE	US
⚠	R460	QRZ0077-100	10	1/4W	FUSIBLE RE	UT
	R461	QRD161J-331	330	1/6W	CARBON RES	
	R462	QRD161J-331	330	1/6W	CARBON RES	
	R463	QRD167J-223	22K	1/6W	CARBON RES	
	R464	QRD167J-152	1.5K	1/6W	CARBON RES	
	R465	QRD167J-562	5.6K	1/6W	CARBON RES	
	R466	QRD167J-223	22K	1/6W	CARBON RES	
	R467	QRD161J-102	1K	1/6W	CARBON RES	
	R503	QRD161J-563	56K	1/6W	CARBON RES	
	R504	QRD161J-563	56K	1/6W	CARBON RES	
⚠	R505	QRD14CJ-272S	2.7K	1/4W	UNF.CARBON	
⚠	R506	QRD14CJ-272S	2.7K	1/4W	UNF.CARBON	
⚠	R507	QRD14CJ-272S	2.7K	1/4W	UNF.CARBON	
⚠	R508	QRD14CJ-272S	2.7K	1/4W	UNF.CARBON	
⚠	R510	QRD14CJ-100SX	10	1/4W	UNF.CARBON	C
⚠	R510	QRD14CJ-100SX	10	1/4W	UNF.CARBON	J
⚠	R510	QRZ0077-100	10	1/4W	FUSIBLE RE	U
⚠	R510	QRZ0077-100	10	1/4W	FUSIBLE RE	UP
⚠	R510	QRZ0077-100	10	1/4W	FUSIBLE RE	US
⚠	R510	QRZ0077-100	10	1/4W	FUSIBLE RE	UT
⚠	R511	QRD14CJ-101S	100	1/4W	UNF.CARBON	C
⚠	R511	QRD14CJ-101S	100	1/4W	UNF.CARBON	J
⚠	R511	QRZ0077-101	100	1/4W	FUSIBLE RE	U
⚠	R511	QRZ0077-101	100	1/4W	FUSIBLE RE	UP
⚠	R511	QRZ0077-101	100	1/4W	FUSIBLE RE	US
⚠	R511	QRZ0077-101	100	1/4W	FUSIBLE RE	UT
	R512	QRD167J-272	2.7K	1/6W	CARBON RES	
⚠	R513	QRD14CJ-100SX	10	1/4W	UNF.CARBON	C
⚠	R513	QRD14CJ-100SX	10	1/4W	UNF.CARBON	J
⚠	R513	QRZ0077-100	10	1/4W	FUSIBLE RE	U
⚠	R513	QRZ0077-100	10	1/4W	FUSIBLE RE	UP
⚠	R513	QRZ0077-100	10	1/4W	FUSIBLE RE	US
⚠	R513	QRZ0077-100	10	1/4W	FUSIBLE RE	UT
	R514	QRD167J-272	2.7K	1/6W	CARBON RES	
	R517	QRD161J-563	56K	1/6W	CARBON RES	
	R518	QRD161J-563	56K	1/6W	CARBON RES	
	R519	QRD14CJ-431SX	430	1/4W	CARBON RES	
	R520	QRD14CJ-431SX	430	1/4W	CARBON RES	
⚠	R521	QRX012J-R22AM	0.22	1W	METAL FILM	
⚠	R522	QRX012J-R22AM	0.22	1W	METAL FILM	
⚠	R525	QRD14CJ-100SX	10	1/4W	UNF.CARBON	
⚠	R526	QRD14CJ-100SX	10	1/4W	UNF.CARBON	
	R529	QRD161J-104	100K	1/6W	CARBON RES	
	R530	QRD161J-823	82K	1/6W	CARBON RES	
	R531	QRD167J-272	2.7K	1/6W	CARBON RES	
	R532	QRD167J-272	2.7K	1/6W	CARBON RES	
	R533	QRD167J-153	15K	1/6W	CARBON RES	
	R534	QRD167J-153	15K	1/6W	CARBON RES	
	R535	QRD161J-103	10K	1/6W	CARBON RES	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R536	QRD161J-103	10K	1/6W	CARBON RES	
	R537	QRD161J-103	10K	1/6W	CARBON RES	
	R538	QRD161J-104	100K	1/6W	CARBON RES	
	R539	QRD161J-103	10K	1/6W	CARBON RES	
	R540	QRD161J-473	47K	1/6W	CARBON RES	
	R541	QRD161J-103	10K	1/6W	CARBON RES	
	R543	QRD14CJ-821SX	820	1/4W	CARBON RES	
	R544	QRD14CJ-821SX	820	1/4W	CARBON RES	
	R545	QRD14CJ-331SX	330	1/4W	UNF.CARBON	
	R546	QRD14CJ-331SX	330	1/4W	UNF.CARBON	
	R547	QRD161J-473	47K	1/6W	CARBON RES	
	R548	QRD161J-473	47K	1/6W	CARBON RES	
	R550	QRD167J-152	1.5K	1/6W	CARBON RES	
	R965	QRD161J-102	1K	1/6W	CARBON RES	U
	R965	QRD161J-102	1K	1/6W	CARBON RES	UP
	R965	QRD161J-102	1K	1/6W	CARBON RES	US
	R965	QRD161J-102	1K	1/6W	CARBON RES	UT
	R966	QRD161J-912	9.1K	1/6W	CARBON RES	U
	R966	QRD161J-912	9.1K	1/6W	CARBON RES	UP
	R966	QRD161J-912	9.1K	1/6W	CARBON RES	US
	R966	QRD161J-912	9.1K	1/6W	CARBON RES	UT
	R967	QRD161J-103	10K	1/6W	CARBON RES	U
	R967	QRD161J-103	10K	1/6W	CARBON RES	UP
	R967	QRD161J-103	10K	1/6W	CARBON RES	US
	R967	QRD161J-103	10K	1/6W	CARBON RES	UT
	R971	QRD167J-152	1.5K	1/6W	CARBON RES	U
	R971	QRD167J-152	1.5K	1/6W	CARBON RES	UP
	R971	QRD167J-152	1.5K	1/6W	CARBON RES	US
	R971	QRD167J-152	1.5K	1/6W	CARBON RES	UT
	R972	QRD161J-123	12K	1/6W	CARBON RES	U
	R972	QRD161J-123	12K	1/6W	CARBON RES	UP
	R972	QRD161J-123	12K	1/6W	CARBON RES	US
	R972	QRD161J-123	12K	1/6W	CARBON RES	UT
	R973	QRD161J-103	10K	1/6W	CARBON RES	U
	R973	QRD161J-103	10K	1/6W	CARBON RES	UP
	R973	QRD161J-103	10K	1/6W	CARBON RES	US
	R973	QRD161J-103	10K	1/6W	CARBON RES	UT
	R974	QRD161J-103	10K	1/6W	CARBON RES	U
	R974	QRD161J-103	10K	1/6W	CARBON RES	UP
	R974	QRD161J-103	10K	1/6W	CARBON RES	US
	R974	QRD161J-103	10K	1/6W	CARBON RES	UT
	R975	QRD161J-103	10K	1/6W	CARBON RES	U
	R975	QRD161J-103	10K	1/6W	CARBON RES	UP
	R975	QRD161J-103	10K	1/6W	CARBON RES	US
	R975	QRD161J-103	10K	1/6W	CARBON RES	UT
	R976	QRD161J-103	10K	1/6W	CARBON RES	U
	R976	QRD161J-103	10K	1/6W	CARBON RES	UP
	R976	QRD161J-103	10K	1/6W	CARBON RES	US
	R976	QRD161J-103	10K	1/6W	CARBON RES	UT
	R977	QRD161J-103	10K	1/6W	CARBON RES	U
	R977	QRD161J-103	10K	1/6W	CARBON RES	UP
	R977	QRD161J-103	10K	1/6W	CARBON RES	US
	R977	QRD161J-103	10K	1/6W	CARBON RES	UT
	R978	QRD161J-103	10K	1/6W	CARBON RES	U
	R978	QRD161J-103	10K	1/6W	CARBON RES	UP
	R978	QRD161J-103	10K	1/6W	CARBON RES	US
	R978	QRD161J-103	10K	1/6W	CARBON RES	UT
	R979	QRD161J-105	1M	1/6W	CARBON RES	U
	R979	QRD161J-105	1M	1/6W	CARBON RES	UP
	R979	QRD161J-105	1M	1/6W	CARBON RES	US
	R979	QRD161J-105	1M	1/6W	CARBON RES	UT
	R980	QRD167J-682	6.8K	1/6W	CARBON RES	U
	R980	QRD167J-682	6.8K	1/6W	CARBON RES	UP
	R980	QRD167J-682	6.8K	1/6W	CARBON RES	US
	R980	QRD167J-682	6.8K	1/6W	CARBON RES	UT
	R981	QRD161J-331	330	1/6W	CARBON RES	U
	R981	QRD161J-331	330	1/6W	CARBON RES	UP
	R981	QRD161J-331	330	1/6W	CARBON RES	US
	R981	QRD161J-331	330	1/6W	CARBON RES	UT
	R982	QRD161J-303Y	30K	1/6W	CARBON RES	U
	R982	QRD161J-303Y	30K	1/6W	CARBON RES	UP
	R982	QRD161J-303Y	30K	1/6W	CARBON RES	US
	R982	QRD161J-303Y	30K	1/6W	CARBON RES	UT
	R983	QRD161J-471	470	1/6W	CARBON RES	U
	R983	QRD161J-471	470	1/6W	CARBON RES	UP
	R983	QRD161J-471	470	1/6W	CARBON RES	US
	R983	QRD161J-471	470	1/6W	CARBON RES	UT
	R984	QRD167J-682	6.8K	1/6W	CARBON RES	U
	R984	QRD167J-682	6.8K	1/6W	CARBON RES	UP
	R984	QRD167J-682	6.8K	1/6W	CARBON RES	US
	R984	QRD167J-682	6.8K	1/6W	CARBON RES	UT
	R985	QRD161J-472	4.7K	1/6W	CARBON RES	U
	R985	QRD161J-472	4.7K	1/6W	CARBON RES	UP
	R985	QRD161J-472	4.7K	1/6W	CARBON RES	US
	R985	QRD161J-472	4.7K	1/6W	CARBON RES	UT
	R986	QRD161J-104	100K	1/6W	CARBON RES	U
	R986	QRD161J-104	100K	1/6W	CARBON RES	UP
	R986	QRD161J-104	100K	1/6W	CARBON RES	US
	R986	QRD161J-104	100K	1/6W	CARBON RES	UT
	R987	QRD161J-393	39K	1/6W	CARBON RES	U
	R987	QRD161J-393	39K	1/6W	CARBON RES	UP
	R987	QRD161J-393	39K	1/6W	CARBON RES	US
	R987	QRD161J-393	39K	1/6W	CARBON RES	UT
	R988	QRD161J-221	220	1/6W	CARBON RES	U
	R988	QRD161J-221	220	1/6W	CARBON RES	UP

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	R988	QRD161J-221	220 1/6W CARBON RES	US
	R988	QRD161J-221	220 1/6W CARBON RES	UT
	VR965	QVAA80B-E54C	50K VARIABLE R	U
	VR965	QVAA80B-E54C	50K VARIABLE R	UP
	VR965	QVAA80B-E54C	50K VARIABLE R	US
	VR965	QVAA80B-E54C	50K VARIABLE R	UT

⚠ : SAFETY PARTS

Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		EMW10486-302	PRINTED BOA	C
		EMW10486-302	PRINTED BOA	J
		EMW10486-402	PRINTED BOA	U
		EMW10486-402	PRINTED BOA	UP
		EMW10486-402	PRINTED BOA	US
		EMW10486-402	PRINTED BOA	UT
		EWT011-124	TERMINAL WI	U
		EWT011-124	TERMINAL WI	UP
		EWT011-124	TERMINAL WI	US
		EWT011-124	TERMINAL WI	UT
		E61380-034	FUSE LABEL	UP
		E61380-036	FUSE LABEL	UP
		QWE881-22RR	VINYL WIRE	U
		QWE881-22RR	VINYL WIRE	US
		QWE881-22RR	VINYL WIRE	UT
		QWE882-22RR	VINYL WIRE	U
		QWE882-22RR	VINYL WIRE	US
		QWE882-22RR	VINYL WIRE	UT
		QWE883-20RR	VINYL WIRE	U
		QWE883-20RR	VINYL WIRE	US
		QWE883-20RR	VINYL WIRE	UT
		QWE884-24RR	VINYL WIRE	U
		QWE884-24RR	VINYL WIRE	US
		QWE884-24RR	VINYL WIRE	UT
		QWE886-20RR	VINYL WIRE	U
		QWE886-20RR	VINYL WIRE	US
		QWE886-20RR	VINYL WIRE	UT
		QWE887-08RR	VINYL WIRE	UP
		QWE888-22RR	VINYL WIRE	U
		QWE888-22RR	VINYL WIRE	US
		QWE888-22RR	VINYL WIRE	UT
		QWE889-20RR	VINYL WIRE	U
		QWE889-20RR	VINYL WIRE	US
		QWE889-20RR	VINYL WIRE	UT
	J511	EMV7145-003Z	SOCKET ASSY	
	J965	QMS3L60-E40G	HEADPHONE J	U
	J965	QMS3L60-E40G	HEADPHONE J	UP
	J965	QMS3L60-E40G	HEADPHONE J	US
	J965	QMS3L60-E40G	HEADPHONE J	UT
	L501	EQL0011-R45J1	INDUCTOR	
	L502	EQL0011-R45J1	INDUCTOR	
	P401	EMV5133-003KR	CONNECT TER	
	P952	EMV5142-906	CONNECT TER	U
	P952	EMV5142-906	CONNECT TER	UP
	P952	EMV5142-906	CONNECT TER	US
	P952	EMV5142-906	CONNECT TER	UT
	S001	QSR8001-E01U	ROTARY SWIT	U
	S001	QSR8001-E01U	ROTARY SWIT	US
	S001	QSR8001-E01U	ROTARY SWIT	UT
	X965	ECX0000-400KS	CERAMIC RES	U
	X965	ECX0000-400KS	CERAMIC RES	UP
	X965	ECX0000-400KS	CERAMIC RES	US
	X965	ECX0000-400KS	CERAMIC RES	UT
	BC401	EWS243-074	SOCKET WIRE	
	EP401	EMZ4002-001Z	EARTH PLATE	
	EP402	EMZ4002-001Z	EARTH PLATE	
	FT001	VMZ0087-001Z	FUSE HOLDER	C
	FT001	VMZ0087-001Z	FUSE HOLDER	J
	FT002	VMZ0087-001Z	FUSE HOLDER	C
	FT002	VMZ0087-001Z	FUSE HOLDER	J
	FT003	VMZ0087-001Z	FUSE HOLDER	U
	FT003	VMZ0087-001Z	FUSE HOLDER	UP
	FT003	VMZ0087-001Z	FUSE HOLDER	US
	FT003	VMZ0087-001Z	FUSE HOLDER	UT
	FT004	VMZ0087-001Z	FUSE HOLDER	U
	FT004	VMZ0087-001Z	FUSE HOLDER	UP
	FT004	VMZ0087-001Z	FUSE HOLDER	US
	FT004	VMZ0087-001Z	FUSE HOLDER	UT
	FT005	VMZ0087-001Z	FUSE HOLDER	U
	FT005	VMZ0087-001Z	FUSE HOLDER	US
	FT005	VMZ0087-001Z	FUSE HOLDER	UT
	FT006	VMZ0087-001Z	FUSE HOLDER	U
	FT006	VMZ0087-001Z	FUSE HOLDER	US
	FT006	VMZ0087-001Z	FUSE HOLDER	UT
	FT101	VMZ0087-001Z	FUSE HOLDER	

⚠ : SAFETY PARTS

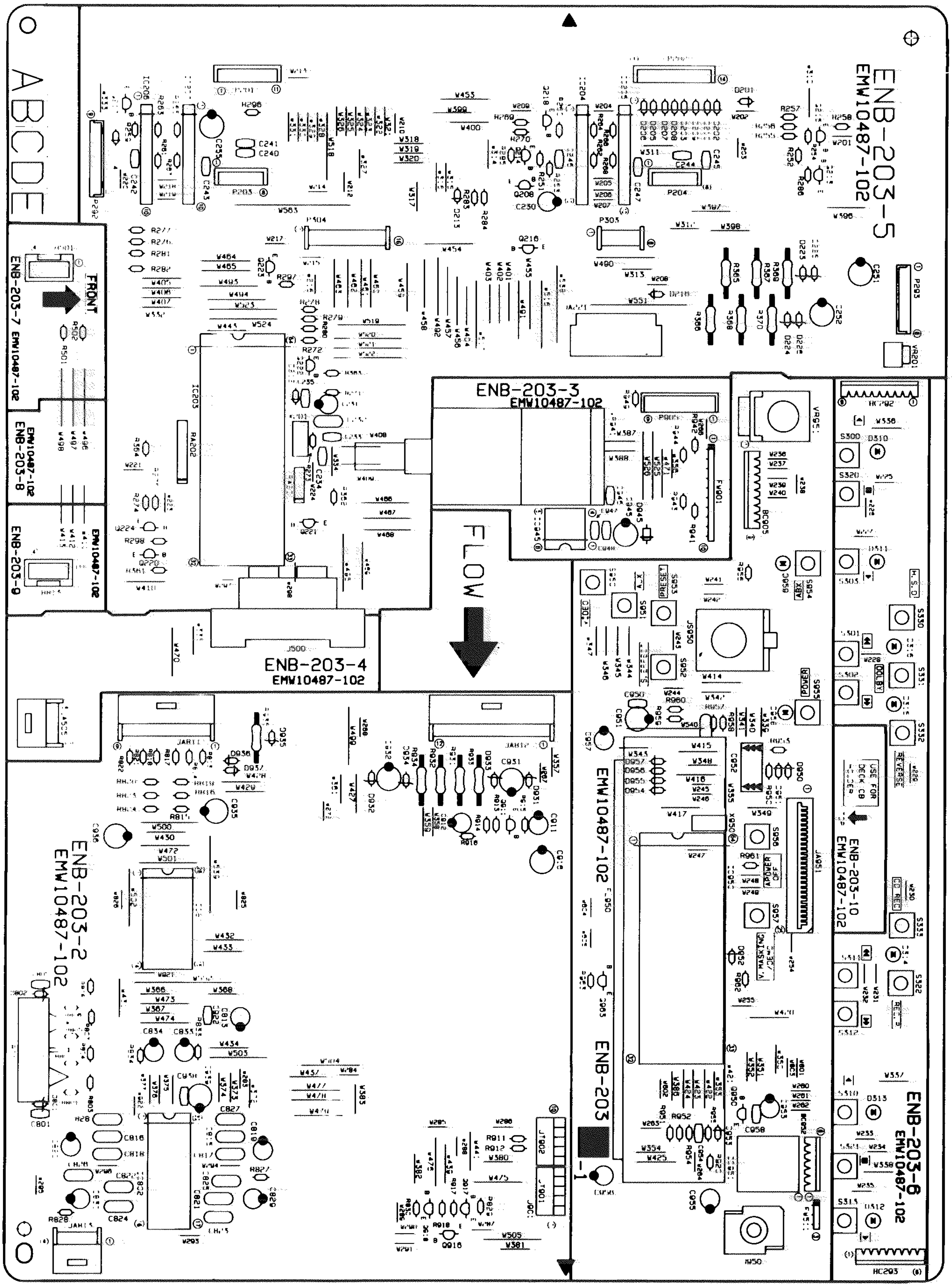
Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	FT102	VMZ0087-001Z	FUSE HOLDER	
	FT103	VMZ0087-001Z	FUSE HOLDER	
	FT104	VMZ0087-001Z	FUSE HOLDER	
	FW402	EWR37D-13LS	CORD	
	JA001	EMV7127-019	CONNECT TER	
	JA403	EMV5163-009R	CONNECT TER	
	JA501	EMV5163-004R	CONNECT TER	
	JA502	EMV7125-007R	CONNECT TER	
	JB221	VMC0161-016	CONNECT TER	
	JB403	EMV7163-009	CONNECT TER	
	JB502	EMV5125-007	MALE CONNEC	
	JB505	EMV7163-004	CONNECT TER	
	JB811	EMV7163-009	CONNECT TER	
	JB812	EMV7163-012	CONNECT TER	
	JB951	VMC0161-025	CONNECT TER	
	JT402	EMV7145-003Z	SOCKET ASSY	
	JT403	EMV7145-004Z	SOCKET ASSY	
	RY550	ESK7D24-2120	RELAY	
	TB001	EMZ4001-001	TAB	
	TB002	EMZ4001-001	TAB	

⚠ : SAFETY PARTS

■ ENB-203 □ Mecha Control, Source Select PC Board Ass'y

Note : ENB-203 □ varies according to the areas employd. See note (1) when placing an order.


ABCDE
ENB-203-5
EMW10487-102
ENB-203-7 EMW10487-102
FRONT
EMW10487-102
ENB-203-8
ENB-203-9
EMW10487-102
ENB-203-3
EMW10487-102
ENB-203-4
EMW10487-102
FLOW
ENB-203-2
EMW10487-102
ENB-203
EMW10487-102
-1
ENB-203-10
EMW10487-102
ENB-203-6
EMW10487-102
USE FOR DECK CB HEADER
J500
IC203
IC206
P203
P204
P303
P304
JA811
JA812
JT801
JT802
HC202
HC203
VR201
W50
PRESET
POWER
DOLBY
REVERSE
CD REC
REPEAT
POWER OFF
V.MASKING
M.S.D
TEXT
SOURCE
ABS
NORMAL

Note (1)

PC Board Ass'y	Version	Dasignated Areas
ENB-203 A	J	the U.S.A.
ENB-203 B	C	Canada
ENB-203 C	U US UT	Universal Type Singapore Taiwan
ENB-203 D	UP	Korea

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	Q208	DTA114YS	DIGITAL TRA ROHM	
	Q213	2SC1740S(R,S)	SI.TRANSIST ROHM	
	Q214	2SC1740S(R,S)	SI.TRANSIST ROHM	
	Q215	2SA933S(RS)	SI.TRANSIST	
	Q216	2SA933S(RS)	SI.TRANSIST	
	Q217	DTC144ES	DIGITAL TRA ROHM	
	Q218	DTC144ES	DIGITAL TRA ROHM	
	Q220	DTC144ES	DIGITAL TRA ROHM	
	Q221	DTC144ES	DIGITAL TRA ROHM	
	Q222	DTC144ES	DIGITAL TRA ROHM	
	Q223	DTC144ES	DIGITAL TRA ROHM	
	Q224	DTC144ES	DIGITAL TRA ROHM	
	Q850	DTC114YS	DIGITAL TRA ROHM	
	Q911	2SC1740S(R,S)	SI.TRANSIST ROHM	
	Q916	DTA144ES	DIGITAL TRA ROHM	
	Q917	2SD2144S(VW)	SI.TRANSIST ROHM	
	Q918	2SD2144S(VW)	SI.TRANSIST ROHM	
	Q950	DTC114YS	DIGITAL TRA ROHM	
	Q963	DTC144ES	DIGITAL TRA ROHM	

⚠ : SAFETY PARTS

I.C.s

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	IC203	HD614081SE39	I.C(MICRO-C HITACHI	
	IC204	LB1641	I.C(DIGI-OT SANYO	
	IC205	LB1641	I.C(DIGI-OT SANYO	
	IC206	LB1641	I.C(DIGI-OT SANYO	
	IC207	LB1641	I.C(DIGI-OT SANYO	
	IC801	TC9162N	I.C(DIGI-MO TOSHIBA	
	IC802	M62417SP	I.C(M) MITSUBISHI	
	IC945	LB1639-CV	I.C(DIGI-OT SANYO	
	IC950	MN171202J5T1	I.C(MICRO-C MATSUSHITA	
	IC951	SPS-420-1	INFRARED DE SANYO	

⚠ : SAFETY PARTS

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	D201	1SS119	SI.DIODE	
	D202	1SS119	SI.DIODE	
	D203	1SS119	SI.DIODE	
	D204	1SS119	SI.DIODE	
	D205	1SS119	SI.DIODE	
	D206	1SS119	SI.DIODE	
	D207	1SS119	SI.DIODE	
	D208	1SS119	SI.DIODE	
	D209	1SS119	SI.DIODE	
	D210	1SS119	SI.DIODE	
	D212	1SS119	SI.DIODE	
	D213	1SS119	SI.DIODE	
	D216	1SS119	SI.DIODE	
	D223	MTZ5.6JC	ZENER DIODE ROHM	
	D224	MTZ5.6JC	ZENER DIODE ROHM	
	D225	MTZ7.5JC	ZENER DIODE ROHM	
	D226	MTZ7.5JC	ZENER DIODE ROHM	
	D310	SLR-342MCA47	L.E.D. ROHM	
	D311	SLR-342MCA47	L.E.D. ROHM	
	D312	SLR-342MCA47	L.E.D. ROHM	
	D313	SLR-342MCA47	L.E.D. ROHM	
	D314	SLR-342VC3F	L.E.D. ROHM	
	D315	SLR-342VC3F	L.E.D. ROHM	
	D316	SLR-342VC3F	L.E.D. ROHM	
	D801	MTZ3.9JB	ZENER DIODE ROHM	
	D802	MTZ3.9JB	ZENER DIODE ROHM	
	D850	1SS119	SI.DIODE	
	D931	MTZ7.5JC	ZENER DIODE ROHM	
	D932	MTZ7.5JC	ZENER DIODE ROHM	
	D933	MTZ5.1JC	ZENER DIODE ROHM	

⚠ : SAFETY PARTS

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	D934	MTZ5.1JC	ZENER DIODE ROHM	
	D935	MTZ5.1JC	ZENER DIODE ROHM	
	D936	1SS119	SI.DIODE	
	D937	1SS119	SI.DIODE	
	D945	1SR139-200	SI.DIODE ROHM	
	D950	1SS119	SI.DIODE	
	D951	1SS119	SI.DIODE	
	D952	1SS119	SI.DIODE	
	D953	1SS119	SI.DIODE	
	D954	1SS119	SI.DIODE	
	D955	1SS119	SI.DIODE	
	D956	1SS119	SI.DIODE	
	D957	1SS119	SI.DIODE	
	D958	SLR-342VC3F	L.E.D. ROHM	
	D959	SLR-342VC3F	L.E.D. ROHM	

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	C230	QETB1CM-476	47MF 16V AL E.CAPAC	
	C231	QETB1CM-476	47MF 16V AL E.CAPAC	
	C232	QCZ0202-155	1.5MF 25V CER.RESIST	
	C233	QCVB1CM-103Y	0.01MF 16V CER.CAPACI	
	C234	QCVB1CM-103Y	0.01MF 16V CER.CAPACI	
	C235	QCBB1HK-102Y	1000PF 50V CER.CAPACI	
	C240	QCHB1EZ-223	0.022MF 25V CER.CAPACI	
	C241	QCHB1EZ-223	0.022MF 25V CER.CAPACI	
	C242	QCVB1CM-103Y	0.01MF 16V CER.CAPACI	
	C243	QCVB1CM-103Y	0.01MF 16V CER.CAPACI	
	C244	QCHB1EZ-223	0.022MF 25V CER.CAPACI	
	C245	QCHB1EZ-223	0.022MF 25V CER.CAPACI	
	C246	QCVB1CM-103Y	0.01MF 16V CER.CAPACI	
	C247	QCVB1CM-103Y	0.01MF 16V CER.CAPACI	
	C251	QETB1AM-107	100MF 10V AL E.CAPAC	
	C252	QETB1AM-107	100MF 10V AL E.CAPAC	
	C255	QETB1CM-107	100MF 16V AL E.CAPAC	
	C801	QCHB1EZ-223	0.022MF 25V CER.CAPACI	
	C805	QCHB1EZ-223	0.022MF 25V CER.CAPACI	
	C813	QETB1EM-106	10MF 25V AL E.CAPAC	C
	C813	QETB1EM-106	10MF 25V AL E.CAPAC	J
	C815	QFV71HJ-683ZM	0.068MF 50V THIN FILM	
	C816	QFV71HJ-683ZM	0.068MF 50V THIN FILM	
	C817	QFV71HJ-184ZM	0.18MF 50V CAPACITOR	
	C818	QFV71HJ-184ZM	0.18MF 50V CAPACITOR	
	C819	QETB1EM-106	10MF 25V AL E.CAPAC	
	C820	QETB1EM-106	10MF 25V AL E.CAPAC	
	C821	QFV81HJ-684	0.68MF 50V THIN FILM	
	C822	QFV81HJ-684	0.68MF 50V THIN FILM	
	C823	QFV81HJ-104	0.1MF 50V THIN FILM	
	C824	QFV81HJ-104	0.1MF 50V THIN FILM	
	C825	QFLB1HJ-332	3300PF 50V MYLAR CAPA	
	C826	QFLB1HJ-332	3300PF 50V MYLAR CAPA	
	C827	QFLB1HJ-103	0.01MF 50V MYLAR CAPA	
	C828	QFLB1HJ-104	0.1MF 50V MYLAR CAPA	
	C829	QETB1EM-106	10MF 25V AL E.CAPAC	
	C830	QETB1EM-106	10MF 25V AL E.CAPAC	
	C833	QETB1HM-106	10MF 50V E.CAPACITO	
	C834	QETB1HM-106	10MF 50V E.CAPACITO	
	C835	QFV71HJ-394ZM	0.39MF 50V THIN FILM	
	C836	QFV71HJ-394ZM	0.39MF 50V THIN FILM	
	C850	QCBB1HK-121Y	120PF 50V CER.CAPACI	
	C911	QETB1HM-105	1MF 50V AL E.CAPAC	
	C912	QETB1EM-106	10MF 25V AL E.CAPAC	
	C916	QETB1EM-476	47MF 25V AL E.CAPAC	
	C922	QCBB1HK-561Y	560PF 50V CER.CAPACI	
	C931	QETB1AM-107	100MF 10V AL E.CAPAC	
	C932	QETB1AM-107	100MF 10V AL E.CAPAC	
	C935	QETB1EM-107	100MF 25V AL E.CAPAC	
	C936	QETB1EM-107	100MF 25V AL E.CAPAC	
	C938	QCVB1CM-103Y	0.01MF 16V CER.CAPACI	
	C939	QETB1AM-107	100MF 10V AL E.CAPAC	
	C945	QETB1AM-107	100MF 10V AL E.CAPAC	
	C946	QCVB1CM-103Y	0.01MF 16V CER.CAPACI	
	C947	QCBB1HK-101Y	100PF 50V CER.CAPACI	
	C948	QCBB1HK-101Y	100PF 50V CER.CAPACI	
	C950	QCHB1EZ-223	0.022MF 25V CER.CAPACI	
	C951	QETB1AM-227	220MF 10V E.CAPACITO	
	C952	QEAD0HZ-479A	47000MF E.CAPACITO	
	C953	QER51HM-475	4.7MF 50V AL E.CAPAC	
	C954	QCVB1CM-103Y	0.01MF 16V CER.CAPACI	
	C955	QEK51CM-107	100MF 16V E.CAPACITO	
	C956	QETB1HM-106	10MF 50V E.CAPACITO	
	C957	QETB1HM-106	10MF 50V E.CAPACITO	
	C958	QCVB1CM-103Y	0.01MF 16V CER.CAPACI	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	R251	QRD161J-224	220K 1/6W CARBON RES	
	R252	QRD161J-184	180K 1/6W CARBON RES	
	R253	QRD161J-224	220K 1/6W CARBON RES	
	R254	QRD161J-224	220K 1/6W CARBON RES	
	R255	QRD161J-132	1.3K 1/6W CARBON RES	
	R256	QRD161J-243	24K 1/6W CARBON RES	
	R257	QRD161J-683	68K 1/6W CARBON RES	
	R258	QRD161J-133Y	13K 1/6W CARBON RES	
	R259	QRD167J-822	8.2K 1/6W CARBON RES	
	R260	QRD167J-822	8.2K 1/6W CARBON RES	
	R261	QRD161J-913	91K 1/6W CARBON RES	
	R262	QRD161J-913	91K 1/6W CARBON RES	
	R263	QRD161J-163	16K 1/6W CARBON RES	
	R264	QRD161J-163	16K 1/6W CARBON RES	
	R265	QRD161J-432	4.3K 1/6W CARBON RES	
	R266	QRD161J-432	4.3K 1/6W CARBON RES	
	R267	QRD161J-103	10K 1/6W CARBON RES	
	R268	QRD161J-103	10K 1/6W CARBON RES	
	R269	QRD161J-222	2.2K 1/6W CARBON RES	
	R270	QRD161J-222	2.2K 1/6W CARBON RES	
	R271	QRD161J-103	10K 1/6W CARBON RES	
	R272	QRD161J-221	220 1/6W CARBON RES	
	R273	QRD161J-105	1M 1/6W CARBON RES	
	R274	QRD161J-221	220 1/6W CARBON RES	
	R275	QRD161J-472	4.7K 1/6W CARBON RES	
	R276	QRD161J-201	200 1/6W CARBON RES	
	R277	QRD161J-271	270 1/6W CARBON RES	
	R278	QRD161J-201	200 1/6W CARBON RES	
	R279	QRD161J-221	220 1/6W CARBON RES	
	R280	QRD161J-271	270 1/6W CARBON RES	
	R281	QRD161J-391	390 1/6W CARBON RES	
	R282	QRD161J-201	200 1/6W CARBON RES	
	R283	QRD161J-274	270K 1/6W CARBON RES	
	R284	QRD161J-104	100K 1/6W CARBON RES	
	R285	QRD161J-103	10K 1/6W CARBON RES	
	R286	QRD161J-103	10K 1/6W CARBON RES	
	R296	QRD161J-103	10K 1/6W CARBON RES	
	R297	QRD161J-103	10K 1/6W CARBON RES	
	R298	QRD161J-103	10K 1/6W CARBON RES	
	R361	QRD161J-472	4.7K 1/6W CARBON RES	
	R362	QRD161J-103	10K 1/6W CARBON RES	
	R363	QRD161J-103	10K 1/6W CARBON RES	
	R364	QRD161J-103	10K 1/6W CARBON RES	
⚠	R365	QRD14CJ-4R7S	4.7 1/4W UNF.CARBON	
⚠	R366	QRD14CJ-4R7S	4.7 1/4W UNF.CARBON	
⚠	R367	QRD14CJ-4R7S	4.7 1/4W UNF.CARBON	
⚠	R368	QRD14CJ-4R7S	4.7 1/4W UNF.CARBON	
⚠	R369	QRD14CJ-101S	100 1/4W UNF.CARBON	
⚠	R370	QRD14CJ-101S	100 1/4W UNF.CARBON	
	R501	QRD161J-471	470 1/6W CARBON RES	
	R502	QRD161J-471	470 1/6W CARBON RES	
	R801	QRD167J-223	22K 1/6W CARBON RES	
	R802	QRD167J-223	22K 1/6W CARBON RES	
	R803	QRD161J-473	47K 1/6W CARBON RES	
	R804	QRD161J-473	47K 1/6W CARBON RES	
	R805	QRD167J-223	22K 1/6W CARBON RES	
	R806	QRD167J-223	22K 1/6W CARBON RES	
	R807	QRD161J-473	47K 1/6W CARBON RES	
	R808	QRD161J-473	47K 1/6W CARBON RES	
	R813	QRD167J-152	1.5K 1/6W CARBON RES	
	R814	QRD167J-152	1.5K 1/6W CARBON RES	
	R815	QRD161J-392	3.9K 1/6W CARBON RES	
	R816	QRD161J-392	3.9K 1/6W CARBON RES	
	R817	QRD161J-681	680 1/6W CARBON RES	
	R818	QRD161J-681	680 1/6W CARBON RES	
	R819	QRD161J-561	560 1/6W CARBON RES	
	R820	QRD161J-561	560 1/6W CARBON RES	
	R821	QRD167J-272	2.7K 1/6W CARBON RES	
	R822	QRD167J-272	2.7K 1/6W CARBON RES	
	R323	QRD167J-332	3.3K 1/6W CARBON RES	
	R824	QRD167J-332	3.3K 1/6W CARBON RES	
	R827	QRD167J-682	6.8K 1/6W CARBON RES	
	R828	QRD167J-632	6.8K 1/6W CARBON RES	
	R829	QRD161J-221	220 1/6W CARBON RES	
	R830	QRD161J-221	220 1/6W CARBON RES	
	R833	QRD161J-104	100K 1/6W CARBON RES	
	R834	QRD161J-104	100K 1/6W CARBON RES	
	R850	QRD167J-223	22K 1/6W CARBON RES	
	R911	QRD161J-224	220K 1/6W CARBON RES	
	R912	QRD161J-224	220K 1/6W CARBON RES	
	R913	QRD161J-105	1M 1/6W CARBON RES	
	R914	QRD161J-202	2K 1/6W CARBON RES	
	R915	QRD161J-202	2K 1/6W CARBON RES	
	R916	QRD161J-561	560 1/6W CARBON RES	
	R917	QRD161J-103	10K 1/6W CARBON RES	
	R918	QRD161J-103	10K 1/6W CARBON RES	
	R920	QRD161J-101	100 1/6W CARBON RES	
⚠	R931	QRD14CJ-4R7S	4.7 1/4W UNF.CARBON	
⚠	R932	QRD14CJ-4R7S	4.7 1/4W UNF.CARBON	
⚠	R933	QRD14CJ-101S	100 1/4W UNF.CARBON	
⚠	R934	QRD14CJ-101S	100 1/4W UNF.CARBON	
	R935	QRD14CJ-331SX	330 1/4W UNF.CARBON	
	R941	QRD161J-122	1.2K 1/6W CARBON RES	
	R942	QRD161J-122	1.2K 1/6W CARBON RES	
	R943	QRD161J-473	47K 1/6W CARBON RES	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	R944	QRD161J-473	47K 1/6W CARBON RES	
	R949	QRD161J-331	330 1/6W CARBON RES	
	R950	QRD161J-101	100 1/6W CARBON RES	
	R951	QRD161J-104	100K 1/6W CARBON RES	
	R952	QRD161J-473	47K 1/6W CARBON RES	
	R953	QRD161J-221	220 1/6W CARBON RES	
	R954	QRD161J-103	10K 1/6W CARBON RES	
	R955	QRD161J-104	100K 1/6W CARBON RES	
	R956	QRD161J-271	270 1/6W CARBON RES	
	R957	QRD161J-103	10K 1/6W CARBON RES	
	R958	QRD161J-103	10K 1/6W CARBON RES	
	R959	QRD161J-473	47K 1/6W CARBON RES	
	R960	QRD161J-473	47K 1/6W CARBON RES	
	R961	QRD161J-102	1K 1/6W CARBON RES	
	R962	QRD161J-221	220 1/6W CARBON RES	
	R963	QRD161J-104	100K 1/6W CARBON RES	
	RA201	QRB049J-103	10K 1/10W RESISTOR	
	RA202	QRB089J-103	10K 1/10W NETWORK RE	
	VR201	QVPA603-103A	10K TRIMMER RE	
	VR941	QVDB71B-E15CJ3	100K VARIABLE R	
	VR951	QVGA81B-E54EJ5	50K VARIABLE R	U
	VR951	QVGA81B-E54EJ5	50K VARIABLE R	UP
	VR951	QVGA81B-E54EJ5	50K VARIABLE R	US
	VR951	QVGA81B-E54EJ5	50K VARIABLE R	UT
	VR951	QVGA81W-E15B	100K VARIABLE R	C
	VR951	QVGA81W-E15B	100K VARIABLE R	J

⚠ : SAFETY PARTS

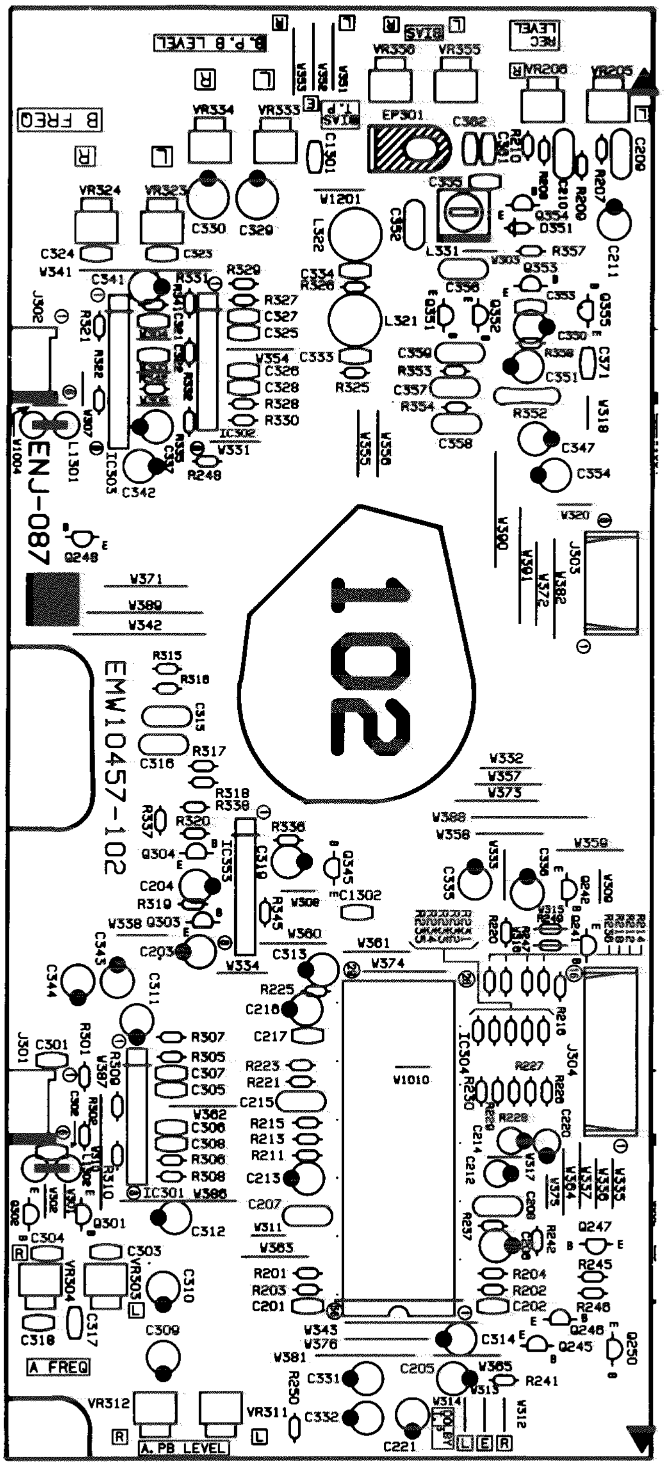
Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		EMW10487-102	PRINTED BOA	
		SC-12N	CEMENT	
	J500	EMB10TV-401AJ3	SPEAKER TER	
	J801	EMN00TV-414AJ2	4P PIN JACK	
	J950	QMS3R81-EE0S	HEADPHONE J	
	P201	VMC0234-P11	CONNECT TER	
	P202	VMC0234-P14	CONNECT TER	
	P203	VMC0234-P08	CONNECT TER	
	P204	VMC0234-P08	CONNECT TER	
	P292	EMV5142-909	CONNECT TER	
	P293	EMV5142-908	CONNECT TER	
	P303	VMC0314-S08	CONNECT TER	
	P304	VMC0314-S16	CONNECT TER	
	P905	EMV5142-909	CONNECT TER	
	S300	ESP0001-023M	TACT SWITCH ▶ (DECK B)	
	S301	ESP0001-023M	TACT SWITCH ▶▶ (DECK B)	
	S302	ESP0001-023M	TACT SWITCH ◀◀ (DECK B)	
	S303	ESP0001-023M	TACT SWITCH ◀ (DECK B)	
	S310	ESP0001-023M	TACT SWITCH ▶ (DECK A)	
	S311	ESP0001-023M	TACT SWITCH ▶▶ (DECK A)	
	S312	ESP0001-023M	TACT SWITCH ◀◀ (DECK A)	
	S313	ESP0001-023M	TACT SWITCH ◀ (DECK A)	
	S320	ESP0001-023M	TACT SWITCH ■ (DECK B)	
	S321	ESP0001-023M	TACT SWITCH ■ (DECK A)	
	S322	ESP0001-023M	TACT SWITCH REC.POUSE	
	S330	ESP0001-023M	TACT SWITCH H.S.D.	
	S331	ESP0001-023M	TACT SWITCH DOLBY	
	S332	ESP0001-023M	TACT SWITCH REVERSE	
	S333	ESP0001-023M	TACT SWITCH CD REC	
	S950	ESP0001-023M	TACT SWITCH VIDEO	
	S951	ESP0001-023M	TACT SWITCH AUX	
	S952	ESP0001-023M	TACT SWITCH S.EFFECT	
	S953	ESP0001-023M	TACT SWITCH PRESET	
	S954	ESP0001-023M	TACT SWITCH ABX	
	S955	ESP0001-023M	TACT SWITCH POWER	
	S956	ESP0001-023M	TACT SWITCH APOWER OFF	
	S957	ESP0001-023M	TACT SWITCH V.MASKING/DEMO	
	X201	ECX0004-194KM	CERAMIC RES	
	X950	ECXP6R0-001ZA	CRYSTAL	
	BC292	EWS329-A919J	SOCKET WIRE	
	BC293	EWS328-A924J	SOCKET WIRE	
	BC905	EWS329-A913J	SOCKET WIRE	
	BC952	EWS326-A913	SOCKET WIRE	U
	BC952	EWS326-A913	SOCKET WIRE	UP
	BC952	EWS326-A913	SOCKET WIRE	US
	BC952	EWS326-A913	SOCKET WIRE	UT
	BK950	E309283-001SM	FL HOLDER	
	FL950	ELU0001-194	FLUORESCENT	
	FS950	E306805-014	FELT SPACER	
	FW511	EWR33D-30LS	FLAT WIRE A	
	FW901	EWR3AD-13LS	FLAT WIRE A	
	JA221	VMC0163-R16	CONNECT TER	
	JA505	EMV5163-004R	CONNECT TER	
	JA811	EMV5163-009R	CONNECT TER	
	JA812	EMV5163-012R	CONNECT TER	
	JA813	EMV5163-004R	CONNECT TER	
	JA951	VMC0161-025	CONNECT TER	
	JB501	EMV7163-004	CONNECT TER	
	JB813	EMV7163-004	CONNECT TER	
	JS950	QSJ1003-E01	PUSH SWITCH	
	JT901	EMV7145-005Z	SOCKET ASSY	
	JT902	EMV7145-005Z	SOCKET ASSY	
	JW850	QWE350-054K4K	S.WIRE	
	JW851	QWE351-104K4K	WIRE	
	JW852	QWE352-05BB	WIRE	
	JW853	QWE353-04BB	WIRE	

⚠ : SAFETY PARTS

■ ENJ-087 ☐ Cassette Amp PC Board Ass'y

Note : ENJ-087 ☐ varies according to the areas employd. See note (1) when placing an order.



Note (1)

PC Board Ass'y	Version	Dasignated Areas
ENJ-087 A	U UP US UT	Universal Type Korea Singapore Taiwan
ENJ-087 C	J	the U.S.A.
ENJ-087 D	C	Canada

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	Q245	2SD2144S(VW)	SI.TRANSIST ROHM	
	Q246	2SD2144S(VW)	SI.TRANSIST ROHM	
	Q247	DTA144ES	DIGITAL TRA ROHM	
	Q248	DTC144ES	DIGITAL TRA ROHM	
	Q250	DTC144ES	DIGITAL TRA ROHM	
	Q301	DTC144ES	DIGITAL TRA ROHM	
	Q302	DTC144ES	DIGITAL TRA ROHM	
	Q303	2SC1740S(R,S)	SI.TRANSIST ROHM	
	Q304	2SC1740S(R,S)	SI.TRANSIST ROHM	
	Q345	DTC144ES	DIGITAL TRA ROHM	
	Q351	2SC1740S(R,S)	SI.TRANSIST ROHM	
	Q352	2SC1740S(R,S)	SI.TRANSIST ROHM	
	Q353	2SC1740S(R,S)	SI.TRANSIST ROHM	

⚠ : SAFETY PARTS

I.C.s

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	IC301	VC4580LD	I.C(MONO-AN DAINICHI	
	IC302	VC4580LD	I.C(MONO-AN DAINICHI	
	IC303	UPC1330HA	I.C(MONO-AN NEC	
	IC304	HA12171NT	I.C(MONO-AN HITACHI	
	IC353	BA8221AN	I.C(MONO-AN ROHM	

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	C201	QCXB1CM-472Y	4700PF 16V CER.CAPACI	
	C202	QCXB1CM-472Y	4700PF 16V CER.CAPACI	
	C203	QETB1HM-105	1MF 50V AL E.CAPAC	
	C204	QETB1HM-105	1MF 50V AL E.CAPAC	
	C205	QETB1EM-106	10MF 25V AL E.CAPAC	
	C206	QETB1EM-106	10MF 25V AL E.CAPAC	
	C207	QFV81HJ-104	0.1MF 50V THIN FILM	
	C208	QFV81HJ-104	0.1MF 50V THIN FILM	
	C211	QETB1HM-105	1MF 50V AL E.CAPAC	
	C212	QEK51HM-105G	1MF 50V AL E.CAPAC	
	C213	QER61HM-334Z	0.33MF 50V AL E.CAPAC	
	C214	QER61HM-334Z	0.33MF 50V AL E.CAPAC	
	C215	QFLB1HJ-472	4700PF 50V MYLAR CAPA	
	C216	QETB1HM-474	0.47MF 50V ELECTRO	
	C217	QCXB1CM-222Y	2200PF 16V CER.CAPACI	
	C220	QEK51HM-225G	2.2MF 50V AL E.CAPAC	
	C221	QETB1HM-475E	4.7MF 50V E.CAPACITO	
	C301	QCBB1HK-331Y	330PF 50V CER.CAPACI	
	C302	QCBB1HK-331Y	330PF 50V CER.CAPACI	
	C303	QCBB1HK-331Y	330PF 50V CER.CAPACI	
	C304	QCBB1HK-331Y	330PF 50V CER.CAPACI	
	C305	QCBB1HK-101Y	100PF 50V CER.CAPACI	
	C306	QCBB1HK-101Y	100PF 50V CER.CAPACI	
	C307	QCVB1CM-822Y	8200PF 16V CER.CAPACI	
	C308	QCVB1CM-822Y	8200PF 16V CER.CAPACI	
	C309	QETB1AM-107	100MF 10V AL E.CAPAC	
	C310	QETB1AM-107	100MF 10V AL E.CAPAC	
	C311	QETB1HM-105	1MF 50V AL E.CAPAC	
	C312	QETB1HM-105	1MF 50V AL E.CAPAC	
	C313	QETB1AM-107	100MF 10V AL E.CAPAC	
	C314	QETB1AM-107	100MF 10V AL E.CAPAC	
	C315	QFV81HJ-473	0.047MF 50V THIN FILM	
	C316	QFV81HJ-473	0.047MF 50V THIN FILM	
	C317	QCBB1HK-102Y	1000PF 50V CER.CAPACI	
	C318	QCBB1HK-102Y	1000PF 50V CER.CAPACI	

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	C319	QETB1AM-476	47MF 10V E.CAPACITO	
	C321	QCXB1CM-122	1200PF 16V POLYPROPY.	
	C322	QCXB1CM-122	1200PF 16V POLYPROPY.	
	C323	QCBB1HK-331Y	330PF 50V CER.CAPACI	
	C324	QCBB1HK-331Y	330PF 50V CER.CAPACI	
	C325	QCBB1HK-101Y	100PF 50V CER.CAPACI	
	C326	QCBB1HK-101Y	100PF 50V CER.CAPACI	
	C327	QCVB1CM-822Y	8200PF 16V CER.CAPACI	
	C328	QCVB1CM-822Y	8200PF 16V CER.CAPACI	
	C329	QEK51CM-107	100MF 16V E.CAPACITO	
	C330	QEK51CM-107	100MF 16V E.CAPACITO	
	C331	QETB1HM-105	1MF 50V AL E.CAPAC	
	C332	QETB1HM-105	1MF 50V AL E.CAPAC	
	C333	QCBB1HK-101Y	100PF 50V CER.CAPACI	
	C334	QCBB1HK-101Y	100PF 50V CER.CAPACI	
	C335	QETB1EM-106	10MF 25V AL E.CAPAC	
	C336	QETB1EM-106	10MF 25V AL E.CAPAC	
	C337	QEK51CM-226	22MF 16V AL E.CAPAC	
	C341	QER51HM-105G	1MF 50V AL E.CAPAC	
	C342	QER51HM-105G	1MF 50V AL E.CAPAC	
	C343	QETB1AM-107	100MF 10V AL E.CAPAC	
	C344	QETB1AM-107	100MF 10V AL E.CAPAC	
	C347	QETB1CM-226	22MF 16V E.CAPACITO	
	C350	QETB1HM-105	1MF 50V AL E.CAPAC	
	C351	QETB1EM-476	47MF 25V AL E.CAPAC	
	C352	QFP31HG-562	5600PF 50V POLYPROPY.	
	C353	QCVB1CM-103Y	0.01MF 16V CER.CAPACI	
	C354	QETB1CM-226	22MF 16V E.CAPACITO	
	C356	QFLB1HJ-153	0.015MF 50V MYLAR CAPA	
	C357	QFLB1HJ-332	3300PF 50V MYLAR CAPA	
	C358	QFLB1HJ-332	3300PF 50V MYLAR CAPA	
	C359	QFLB1HJ-682	6800PF 50V MYLAR CAPA	
	C361	QCBB1HK-101Y	100PF 50V CER.CAPACI	
	C362	QCBB1HK-101Y	100PF 50V CER.CAPACI	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	R201	QRD167J-153	15K 1/6W CARBON RES	
	R202	QRD167J-153	15K 1/6W CARBON RES	
	R203	QRD161J-123	12K 1/6W CARBON RES	
	R204	QRD161J-123	12K 1/6W CARBON RES	
	R209	QRD167J-153	15K 1/6W CARBON RES	
	R210	QRD167J-153	15K 1/6W CARBON RES	
	R211	QRD161J-823	82K 1/6W CARBON RES	
	R212	QRD167J-562	5.6K 1/6W CARBON RES	
	R213	QRD161J-243	24K 1/6W CARBON RES	
	R214	QRD167J-682	6.8K 1/6W CARBON RES	
	R215	QRD167J-113	11K 1/6W CARBON RES	
	R216	QRD167J-332	3.3K 1/6W CARBON RES	
	R218	QRD161J-222	2.2K 1/6W CARBON RES	
	R220	QRD167J-223	22K 1/6W CARBON RES	
	R221	QRD161J-103	10K 1/6W CARBON RES	
	R223	QRD161J-183	18K 1/6W CARBON RES	
	R225	QRD161J-184	180K 1/6W CARBON RES	
	R226	QRD167J-223	22K 1/6W CARBON RES	
	R227	QRD167J-223	22K 1/6W CARBON RES	
	R228	QRD167J-223	22K 1/6W CARBON RES	
	R229	QRD167J-223	22K 1/6W CARBON RES	
	R230	QRD167J-223	22K 1/6W CARBON RES	
	R231	QRD167J-223	22K 1/6W CARBON RES	
	R232	QRD167J-223	22K 1/6W CARBON RES	
	R233	QRD167J-223	22K 1/6W CARBON RES	
	R234	QRD167J-223	22K 1/6W CARBON RES	
	R235	QRD167J-223	22K 1/6W CARBON RES	
	R237	QRD161J-183	18K 1/6W CARBON RES	
	R241	QRD161J-392	3.9K 1/6W CARBON RES	
	R242	QRD161J-392	3.9K 1/6W CARBON RES	
	R245	QRD161J-472	4.7K 1/6W CARBON RES	
	R246	QRD161J-472	4.7K 1/6W CARBON RES	
	R248	QRD161J-103	10K 1/6W CARBON RES	
	R250	QRD161J-103	10K 1/6W CARBON RES	
	R301	QRD161J-224	220K 1/6W CARBON RES	
	R302	QRD161J-224	220K 1/6W CARBON RES	
	R305	QRD167J-334	330K 1/6W CARBON RES	
	R306	QRD167J-334	330K 1/6W CARBON RES	
	R307	QRD161J-183	18K 1/6W CARBON RES	
	R308	QRD161J-183	18K 1/6W CARBON RES	
	R309	QRD167J-151	150 1/6W CARBON RES	
	R310	QRD167J-151	150 1/6W CARBON RES	
	R315	QRD161J-564	560K 1/6W CARBON RES	
	R316	QRD161J-564	560K 1/6W CARBON RES	
	R317	QRD161J-103	10K 1/6W CARBON RES	
	R318	QRD161J-103	10K 1/6W CARBON RES	
	R319	QRD167J-332	3.3K 1/6W CARBON RES	
	R320	QRD167J-332	3.3K 1/6W CARBON RES	
	R321	QRD161J-100	10 1/6W CARBON RES	
	R322	QRD161J-100	10 1/6W CARBON RES	
	R325	QRD167J-153	15K 1/6W CARBON RES	
	R326	QRD167J-153	15K 1/6W CARBON RES	
	R327	QRD167J-334	330K 1/6W CARBON RES	
	R328	QRD167J-334	330K 1/6W CARBON RES	
	R329	QRD161J-183	18K 1/6W CARBON RES	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	R330	QRD161J-183	18K 1/6W CARBON RES	
	R331	QRD167J-151	150 1/6W CARBON RES	
	R332	QRD167J-151	150 1/6W CARBON RES	
	R335	QRD161J-101	100 1/6W CARBON RES	
	R336	QRD161J-105	1M 1/6W CARBON RES	
	R337	QRD161J-133Y	13K 1/6W CARBON RES	
	R338	QRD161J-133Y	13K 1/6W CARBON RES	
	R341	QRD167J-334	330K 1/6W CARBON RES	
	R342	QRD167J-334	330K 1/6W CARBON RES	
	R345	QRD161J-103	10K 1/6W CARBON RES	
⚠	R352	QRD14CJ-470SX	47 1/4W UNF.CARBON	
	R353	QRD161J-393	39K 1/6W CARBON RES	
	R354	QRD161J-393	39K 1/6W CARBON RES	
	R358	QRD161J-103	10K 1/6W CARBON RES	
	VR205	QVPA603-503A	50K VARIABLE R	
	VR206	QVPA603-503A	50K VARIABLE R	
	VR303	QVPA603-104A	100K TRIMMER RE	
	VR304	QVPA603-104A	100K TRIMMER RE	
	VR311	QVPA603-501A	500 TRIMMER RE	
	VR312	QVPA603-501A	500 TRIMMER RE	
	VR323	QVPA603-104A	100K TRIMMER RE	
	VR324	QVPA603-104A	100K TRIMMER RE	
	VR333	QVPA603-501A	500 TRIMMER RE	
	VR334	QVPA603-501A	500 TRIMMER RE	
	VR355	QVPA603-104A	100K TRIMMER RE	
	VR356	QVPA603-104A	100K TRIMMER RE	

⚠ : SAFETY PARTS

Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		EMW10457-102	PRINTED BOA	
	J301	EMV7155-106R	CONNECT TER	
	J302	EMV7155-106R	CONNECT TER	
	J303	EMV5132-008R	CONNECT TER	
	J304	EMV5132-016R	CONNECT TER	
	L321	EQL2106-223	INDUCTOR	
	L322	EQL2106-223	INDUCTOR	
	L331	ENZ6002-012	OSCILLATOR	

⚠ : SAFETY PARTS

—— MEMO ——

XT-C550

< PARTS LIST >

Note : All printed circuit boards and its assemblies are not available as service parts.

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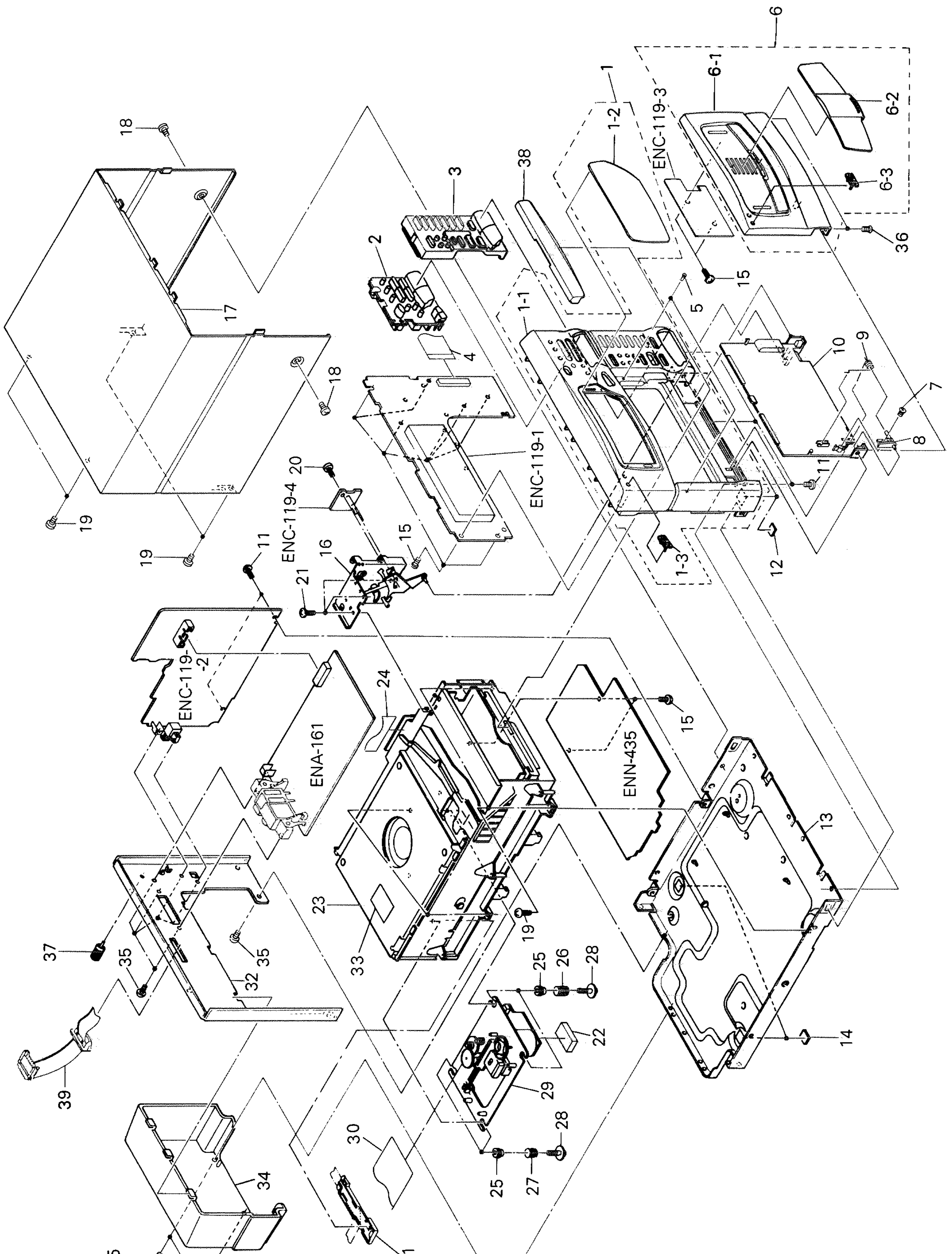
General Exploded View and Parts List

Symbol No. M 3 M M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ENA-161
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ENN-435
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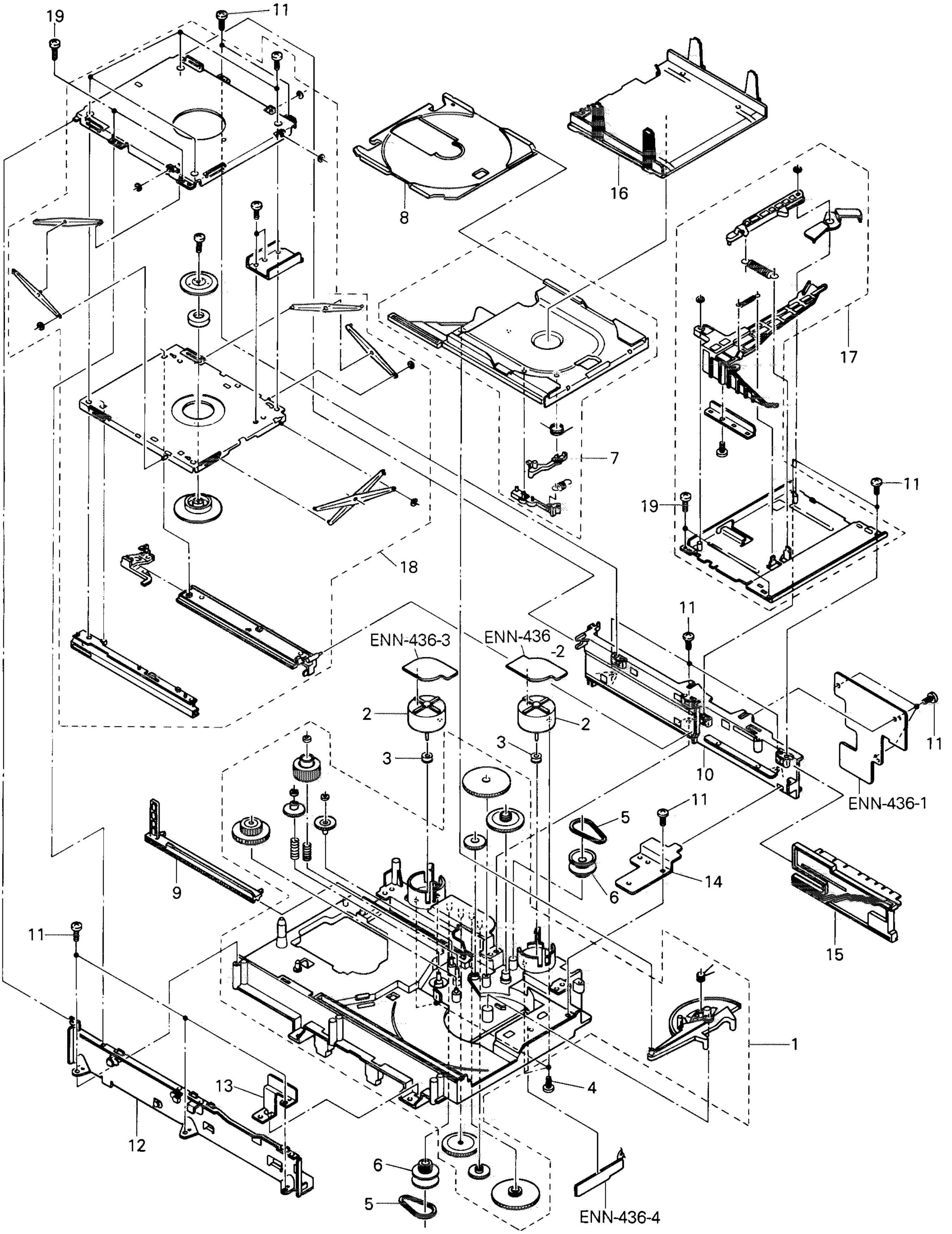
■ PARTS LIST

⚠	Item	Part Number	Part Name	Q'ty	Description	Area
	1	EFP-XTC550U(S)	FRONT PANEL ASS'Y	1		
	1-1	E102967-002SM	FRONT PANEL	1		
	1-2	E208394-001SM	WINDOW SCREEN	1	TUNER	
	1-3	E406971-221	JVC MARK	1		
	2	E208396-002SM	PUSH BUTTON	1	TUNER	
	3	E208398-002SM	PUSH BUTTON	1	CD	
	4	VWF1222-12TTBX	FFC CABLE	1	FC201	
	5	E69897-002	RUBBER CUSHION	2		
	6	E102969-003SA	SUB PANEL ASS'Y	1		
	6-1	E102969-003SM	SUB PANEL	1		
	6-2	E208400-002SM	WINDOW SCREEN	1	CD	
	6-3	E406971-221	JVC MARK	1		
	7	SDSF2606Z	SCREW	1		
	8	E309272-001SM	DOOR HINGE	1		
	9	E408501-001SM	SPRING	1		
	10	E208402-002SM	BACK PANEL	1		
	11	SBSG3008CC	TAPPING SCREW	5		
	12	E75896-001	SPACER	2	FRONT FOOT	
	13	E102971-001SM	CHASSIS BASE	1		
	14	E75896-006	FELT SPACER	2	REAR FOOT	
	15	SDSF2608Z	SCREW	12		
	16	E309186-001SM	DOOR MECHA ASSY	1		
	17	E207787-011	METAL COVER	1		
	18	SDSG3006M	TAPPING SCREW	2		
	19	GBSG3008CC	TAPPING SCREW	8		
	20	SDST3006Z	TAPPING SCREW	1		
	21	SBSF3008Z	TAPPING SCREW	3		
	22	E306805-163	SPACER	1		
	23	--------------	CHANGER MECHA	1	SEE PAGE 5-4	
	24	VWF1234-16TTB	FFC CABLE	1	FC204	
	25	E407153-001SS	INSULATOR	4		
	26	E408373-001	SPRING(BLACK)	2		
	27	E408373-002	SPRING	2		
	28	E408361-001	SCREW	4		
	29	--------------	CD MECHA	1	SEE PAGE 5-6	
	30	VWF1015-16PPA	FFC CABLE	1	FC203	
	31	E308181-001	FFC HOLDER	1		
	32	E208404-010SM	REAR PANEL	1		J
		E208404-011SM	REAR PANEL	1		C
		E208404-012SM	REAR PANEL	1		U,US,UT
	33	E406507-001	CAUTION LABEL	1		C,U,US,UT
	34	E208406-001SM	REAR COVER	1		
	35	E73273-003	SPECIAL SCREW	7		
	36	SSSF2606M	TAPPING SCREW	2		
	37	E408091-001	GND TERMINAL	1		
	38	E208403-001SM	CD FITTING	1		
	39	EWP902-046	FLAT WIRE ASSY	1	SC001	
	-	E70891-001	CLASS 1 LABEL	1		U,US,UT

The Marks for Designated Areas

J ...... the U.S.A. C ..... Canada U ...... Universal Type UT ..... Taiwan
US .... Singapore
No mark indicates all area.

CD Changer Mechanism Ass'y and Parts List Symbol No. M 4 M M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ENN-436-4

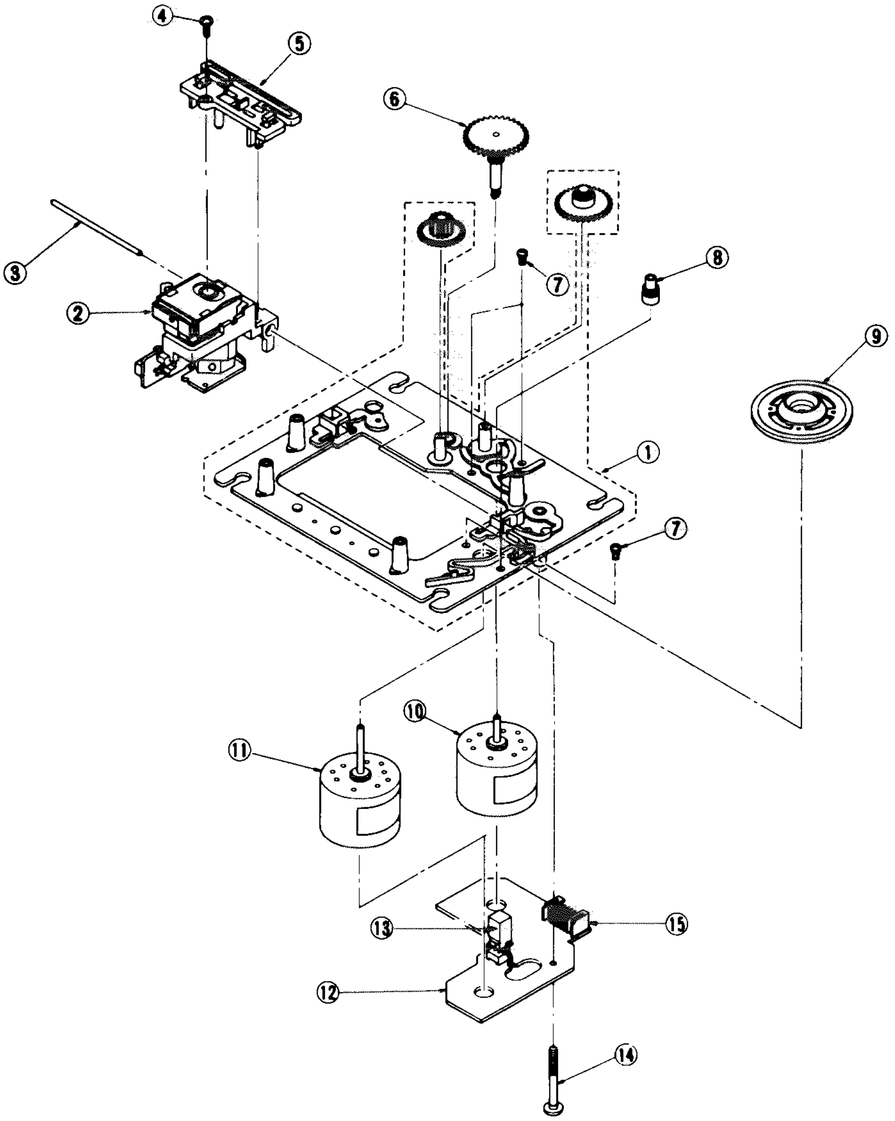
■ Parts List (CD Changer Mechanism Ass'y)

Symbol No. M 4 M M

⚠	Item	Part Number	Part Name	Q'ty	Description	Area
	1	E208436-001SM	MECHA BASE ASSY	1		
	2	RF-500TB-14415	DC MOTOR	2		
	3	E75984-222SS	MOTOR PULLEY	2		
	4	SPSP2604Z	SCREW	4		
	5	E75950-002	REEL BELT	2		
	6	E75985-222SS	GEAR(1)	2		
	7	E208456-001SM	TRAY BASE ASSY	1		
	8	E26554-004	CD TRAY	1		
	9	E309148-002SM	HOOK GUIDE	1		
	10	E102925-001SM	SIDE BRACKET	1		
	11	SBSF2608Z	TAPPING SCREW	14		
	12	E208305-001SM	SIDE BRACKET	1		
	13	E408514-001SM	EARTH PLATE	1		
	14	E408517-001SM	BRACKET PLATE	1		
	15	E208303-001SM	ELEVATOR CAM	1		
	16	E208302-002SM	MAGAZIN GUIDE	1		
	17	E208458-002SM	SAFETY LEVER ASSY	1		
	18	E102922-001SM	ELEVATOR ASSY	1		
	19	SDST2606Z	TAPPING SCREW	4		

CD Mechanism Ass'y and Parts List

Symbol No. M 5 M M



Symbol No. M 5 M M

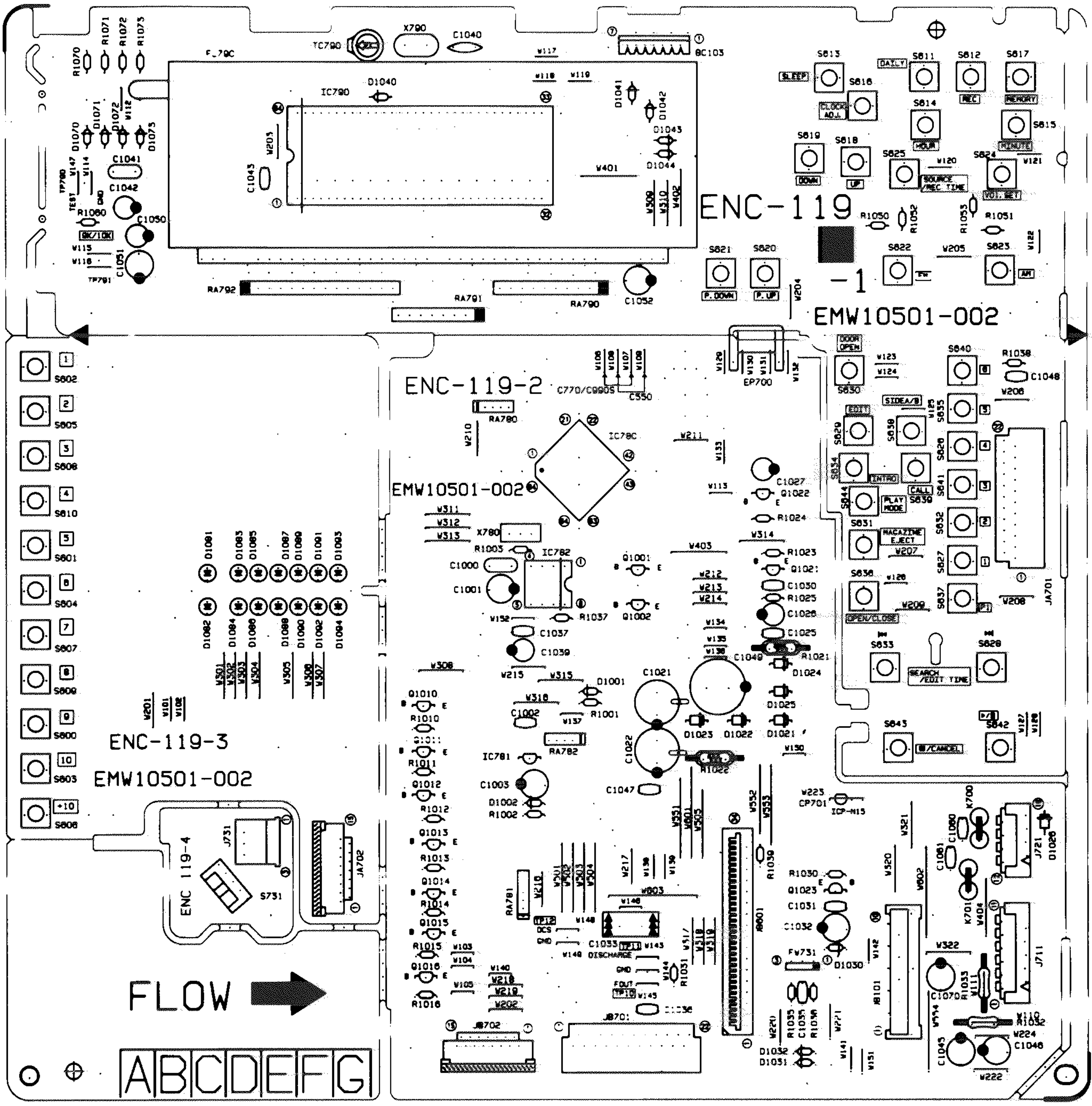
■ Parts List (CD Mechanism Ass'y)

⚠	Item	Part Number	Part Name	Q'ty	Description	Area
	1	EPB-002A	CD MECHA BASE A	1		
	2	OPTIMA-6S	OPTICAL PICK-UP	1		
	3	E406777-001	C.D SHAFT	1		
	4	SDSF2006Z	SCREW	1		
	5	E307746-332SF	C.D RACK	1		
	6	E307745-221SS	CAM GEAR	1		
	7	SDSP2003N	SCREW	4		
	8	E406750-221SS	PINION GEAR	1		
	9	EPB309173A	TURNTABLE	1		
	10	E406784-001	DC MOTOR	1		
	11	E406783-001	DC MOTOR	1		
	12	EMW10190-001(S)	PRINTED BOARD	1		
	13	ESB1100-005	LEAF SWITCH	1		
	14	E75832-221SS	SPECIAL SCREW	1		
	15	EMV5109-006B	CONNECT TERMINAL	1		

Printed Circuit Board Ass'y and Parts List

■ ENC-119 ☐ Display & KEY Matrix PC Board Ass'y

Note : ENC-119 ☐ varies according to the areas employed. See note (1) when placing an order.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ENC-119-3
EMW10501-002
ENC 119-4
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ABCDEFG
SLEEP
DAILY
CLOCK ADJ.
REC
MEMORY
HOUR
MINUTE
DOWN
UP
SOURCE /REC TIME
VOL SET
P.DOWN
P.UP
DOOR OPEN
SIDE A/B
EDIT
INTRO
CALL
PLAY MODE
MAGAZINE EJECT
OPEN/CLOSE
SEARCH /EDIT TIME
■/CANCEL
IC780
IC790
IC782
IC781
X790
X780
JA701
JA702
J721
J731
J711
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Note (1)

PC Board Ass'y	Version	Designated Areas
ENN-119 B	C	Canada
ENN-119 A	J	the U.S.A.
ENN-119 C	U	Universal Type
	UT	Taiwan
	US	Singapore

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	Q1001	DTA114YS	DIGITAL TRA ROHM	
	Q1002	DTC114YS	DIGITAL TRA ROHM	
	Q1021	2SA934(Q,R)	SI.TRANSIST ROHM	
	Q1022	DTA144ES	DIGITAL TRA ROHM	
	Q1023	2SC2060(Q,R)	SI.TRANSIST ROHM	

⚠ : SAFETY PARTS

I.C.s

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	IC780	MN172412J5N2	I.C(MICRO-C MATSUSHITA	C
	IC780	MN172412J5N2	I.C(MICRO-C MATSUSHITA	J
	IC780	MN172412J5N2	I.C(MICRO-C MATSUSHITA	U
	IC780	MN172412J5N2	I.C(MICRO-C MATSUSHITA	US
	IC780	MN172412J5N2	I.C(MICRO-C MATSUSHITA	UT

⚠ : SAFETY PARTS

I.C.s

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	IC781	MN1281(P,Q)	I.C(DIGI-MO MATSUSHITA	
	IC782	AT24C01A-10PC	I.C(EP-ROM) MITSUBISHI	
	IC790	MN171602J5R	I.C(MICRO-C MATSUSHITA	

⚠ : SAFETY PARTS

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	D1001	1SS119	SI.DIODE	
	D1002	1SS119	SI.DIODE	
	D1021	1SR139-200	SI.DIODE ROHM	
	D1022	1SR139-200	SI.DIODE ROHM	
	D1023	1SR139-200	SI.DIODE ROHM	
	D1024	1SR139-200	SI.DIODE ROHM	
	D1025	1SR139-200	SI.DIODE ROHM	
	D1026	1SR139-200	SI.DIODE ROHM	
	D1030	MTZ7.5JC	ZENER DIODE ROHM	
	D1031	1SS119	SI.DIODE	
	D1032	1SS119	SI.DIODE	
	D1040	1SS119	SI.DIODE	
	D1041	1SS119	SI.DIODE	
	D1042	1SS119	SI.DIODE	
	D1043	1SS119	SI.DIODE	
	D1044	1SS119	SI.DIODE	
	D1070	1SS119	SI.DIODE	U
	D1070	1SS119	SI.DIODE	US
	D1070	1SS119	SI.DIODE	UT
	D1071	1SS119	SI.DIODE	C
	D1071	1SS119	SI.DIODE	J
	D1072	1SS119	SI.DIODE	C
	D1072	1SS119	SI.DIODE	J
	D1073	1SS119	SI.DIODE	C
	D1073	1SS119	SI.DIODE	J

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	C1000	QCZ0205-155	1.5MF 25V C.CAPACITO	
	C1001	QETB0JM-107	100MF 6.3V AL E.CAPAC	
	C1002	QCHB1EZ-223	0.022MF 25V CER.CAPACI	
	C1003	QETB0JM-107	100MF 6.3V AL E.CAPAC	
	C1021	QETB1CM-108	1000MF 16V AL E.CAPAC	
	C1022	QETB1CM-108	1000MF 16V AL E.CAPAC	
	C1025	QCHB1EZ-223	0.022MF 25V CER.CAPACI	
	C1030	QCHB1EZ-223	0.022MF 25V CER.CAPACI	
	C1031	QCHB1EZ-223	0.022MF 25V CER.CAPACI	
	C1032	QETB1CM-107	100MF 16V AL E.CAPAC	
	C1033	QEAD0HZ-10AZM	AL E.CAPAC	
	C1035	QCHB1EZ-223	0.022MF 25V CER.CAPACI	
	C1036	QCVB1CM-103Y	0.01MF 16V CER.CAPACI	
	C1037	QCHB1EZ-223	0.022MF 25V CER.CAPACI	
	C1039	QETB1HM-225	2.2MF 50V AL E.CAPAC	
	C1040	QCT26CH-330	33PF 50V CER.CAPACI	
	C1041	QCZ0205-155	1.5MF 25V C.CAPACITO	
	C1042	QETB1CM-226	22MF 16V E.CAPACITO	
	C1043	QCVB1CM-103Y	0.01MF 16V CER.CAPACI	
	C1045	QETB1HM-476	47MF 50V E.CAPACITO	
	C1046	QETB1HM-476	47MF 50V E.CAPACITO	
	C1047	QCVB1CM-103Y	0.01MF 16V CER.CAPACI	
	C1050	QETB1HM-106	10MF 50V E.CAPACITO	
	C1051	QETB1HM-475E	4.7MF 50V E.CAPACITO	
	TC790	ENZ1003-015	0.1MF TRIMMER CA	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	RA780	QRB049J-472	4.7K 1/10W NETWORK RE	
	RA781	QRB059J-472	4.7K 1/10W NETWORK RE	
	RA782	QRB049J-472	4.7K 1/10W NETWORK RE	
	R1001	QRD161J-103	10K 1/6W CARBON RES	
	R1002	QRD161J-821	820 1/6W CARBON RES	
⚠	R1021	PTH61G30BD2R2N	FUSIBLE RE	C
⚠	R1021	PTH61G30BD2R2N	FUSIBLE RE	U
⚠	R1021	PTH61G30BD2R2N	FUSIBLE RE	US
⚠	R1021	PTH61G30BD2R2N	FUSIBLE RE	UT
⚠	R1021	QRD12CJ-2R2SX	2.2 1/2W CARBON RES	J
⚠	R1022	PTH61G30BD2R2N	FUSIBLE RE	C
⚠	R1022	PTH61G30BD2R2N	FUSIBLE RE	U
⚠	R1022	PTH61G30BD2R2N	FUSIBLE RE	US
⚠	R1022	PTH61G30BD2R2N	FUSIBLE RE	UT
⚠	R1022	QRD12CJ-2R2SX	2.2 1/2W CARBON RES	J
	R1023	QRD161J-472	4.7K 1/6W CARBON RES	
	R1024	QRD161J-331	330 1/6W CARBON RES	
	R1025	QRD161J-472	4.7K 1/6W CARBON RES	
	R1030	QRD161J-472	4.7K 1/6W CARBON RES	
	R1031	QRD161J-470	47 1/6W CARBON RES	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
⚠	R1032	QRD14CJ-1R0SX	1 1/4W UNF.CARBON	U
⚠	R1032	QRD14CJ-1R0SX	1 1/4W UNF.CARBON	US
⚠	R1032	QRD14CJ-1R0SX	1 1/4W UNF.CARBON	UT
⚠	R1032	QRD14CJ-2R7S	2.7 1/4W UNF.CARBON	C
⚠	R1032	QRD14CJ-2R7S	2.7 1/4W UNF.CARBON	J
⚠	R1033	QRD14CJ-1R5SX	1.5 1/4W UNF.CARBON	C
⚠	R1033	QRD14CJ-1R5SX	1.5 1/4W UNF.CARBON	J
	R1035	QRD161J-221	220 1/6W CARBON RES	
	R1036	QRD161J-221	220 1/6W CARBON RES	
	R1037	QRD161J-103	10K 1/6W CARBON RES	
	R1038	QRD167J-223	22K 1/6W CARBON RES	
	R1039	QRD161J-221	220 1/6W CARBON RES	
	R1050	QRD167J-223	22K 1/6W CARBON RES	
	R1051	QRD167J-223	22K 1/6W CARBON RES	
	R1052	QRD167J-223	22K 1/6W CARBON RES	
	R1053	QRD167J-223	22K 1/6W CARBON RES	
	R1060	QRD161J-103	10K 1/6W CARBON RES	
	R1070	QRD161J-104	100K 1/6W CARBON RES	
	R1071	QRD161J-104	100K 1/6W CARBON RES	
	R1072	QRD161J-104	100K 1/6W CARBON RES	
	R1073	QRD161J-104	100K 1/6W CARBON RES	

⚠ : SAFETY PARTS

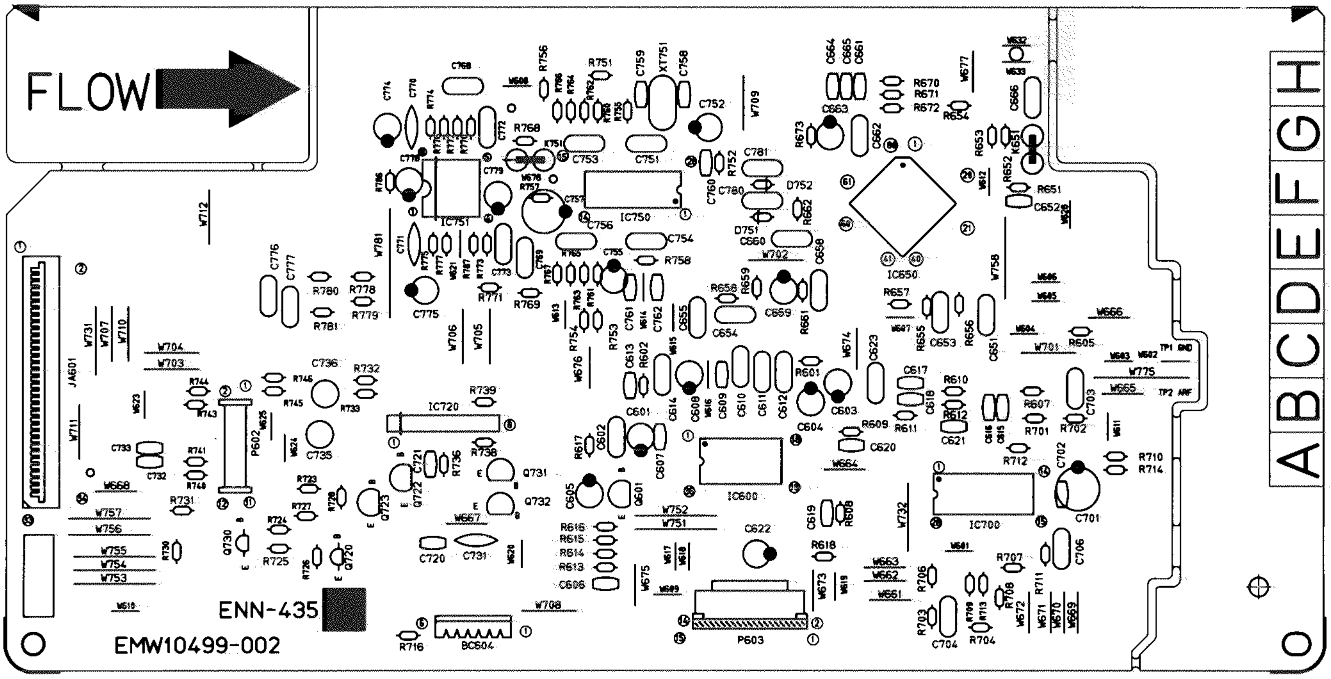
Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		EMW10501-002	PRINTED BOA	
	J711	EMV7141-011M	FLAT WIRE A	
	J721	EMV7141-008M	CONNECT TER	
	J731	VMC0107-R03	CONNECT TER	
	S611	ESP0001-023M	TACT SWITCH **DAILY**	
	S612	ESP0001-023M	TACT SWITCH **REC**	
	S613	ESP0001-023M	TACT SWITCH **SLEEP**	
	S614	ESP0001-023M	TACT SWITCH **HOUR**	
	S615	ESP0001-023M	TACT SWITCH **MINUTE**	
	S616	ESP0001-023M	TACT SWITCH **CLOCK ADJUST**	
	S617	ESP0001-023M	TACT SWITCH **MEMORY**	
	S618	ESP0001-023M	TACT SWITCH **UP**	
	S619	ESP0001-023M	TACT SWITCH **DOWN**	
	S620	ESP0001-023M	TACT SWITCH **PRESET UP**	
	S621	ESP0001-023M	TACT SWITCH **PRESET DOWN**	
	S622	ESP0001-023M	TACT SWITCH **FM**	
	S623	ESP0001-023M	TACT SWITCH **AM**	
	S624	ESP0001-023M	TACT SWITCH **VOLUME POSITION**	
	S625	ESP0001-023M	TACT SWITCH **SOURCE/REC TIME**	
	S626	ESP0001-023M	TACT SWITCH **D4**	
	S627	ESP0001-023M	TACT SWITCH **D1**	
	S628	ESP0001-023M	TACT SWITCH **⏭**	
	S629	ESP0001-023M	TACT SWITCH **EDIT**	
	S630	ESP0001-023M	TACT SWITCH **DOOR OPEN/CLOSE**	
	S631	ESP0001-023M	TACT SWITCH **MAG.EJECT**	
	S632	ESP0001-023M	TACT SWITCH **D2**	
	S633	ESP0001-023M	TACT SWITCH **⏮**	
	S634	ESP0001-023M	TACT SWITCH **INTRO**	
	S635	ESP0001-023M	TACT SWITCH **D5**	
	S636	ESP0001-023M	TACT SWITCH **P1 OPEN/CLOSE**	
	S637	ESP0001-023M	TACT SWITCH **P1**	
	S638	ESP0001-023M	TACT SWITCH **SIDE A/B**	
	S639	ESR0001-023M	TACT SWITCH **CALL**	
	S640	ESP0001-023M	TACT SWITCH **D6**	
	S641	ESP0001-023M	TACT SWITCH **D3**	
	S642	ESP0001-023M	TACT SWITCH **▶/■**	
	S643	ESP0001-023M	TACT SWITCH **■ / CANCEL**	
	S644	ESP0001-023M	TACT SWITCH **P.MODE**	
	S731	ESS1200-002	LEVER SWITC	
	X780	ECXP6R0-001ZA	CRYSTAL	
	X790	ECX0006-000KNJ	CRYSTAL	
	BC103	EWS267-A415J	SOCKET WIRE	
	BK790	E309287-002SM	FL HOLDER	
⚠	CP701	ICP-N15	I.C.PROTECT	C
⚠	CP701	ICP-N15	I.C.PROTECT	U
⚠	CP701	ICP-N15	I.C.PROTECT	US
⚠	CP701	ICP-N15	I.C.PROTECT	UT
	EP700	E70225-001	EARTH PLATE	
	FL790	ELU0001-199	FLUORESCENT	
	FS790	E306805-014	FELT SPACER	
	FW731	EWR33D-16LS	FLAT WIRE A	
	F1080	E3400-431	FELT SPACER	
	JA701	VMC0163-R22	CONNECT TER	C
	JA701	VMC0163-R22	CONNECT TER	J
	JA701	VMC0163-R22	CONNECT TER	U
	JA701	VMC0163-R22	CONNECT TER	US
	JA701	VMC0163-R22	CONNECT TER	UT
	JB101	EMV5140-010	VOLUME SOCK	
	JB601	VMC0163-034	CONNECT TER	C
	JB601	VMC0163-034	CONNECT TER	J
	JB601	VMC0163-034	CONNECT TER	U
	JB601	VMC0163-034	CONNECT TER	US
	JB601	VMC0163-034	CONNECT TER	UT
	JB701	VMC0163-R22	CONNECT TER	C
	JB701	VMC0163-R22	CONNECT TER	J
	JB701	VMC0163-R22	CONNECT TER	U
	JB701	VMC0163-R22	CONNECT TER	US
	JB701	VMC0163-R22	CONNECT TER	UT

⚠ : SAFETY PARTS

■ ENN-435 ☐ CD PC Board Ass'y

Note : ENN435 ☐ varies according to the areas employed. See note (2) when placing an order.



Note (2)

PC Board Ass'y	Version	Designated Areas
ENN-435 A	C J	Canada the U.S.A.
ENN-435 B	U UT US	Universal Type Taiwan Singapore

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	Q601	2SA950(O,Y)	SI.TRANSIST TOSHIBA	
	Q720	DTC144ES	DIGITAL TRA ROHM	
	Q722	2SC2060(Q,R)	SI.TRANSIST ROHM	
	Q723	2SA934(Q,R)	SI.TRANSIST ROHM	
	Q730	DTC144ES	DIGITAL TRA ROHM	
	Q731	2SC2060(Q,R)	SI.TRANSIST ROHM	
	Q732	2SA934(Q,R)	SI.TRANSIST ROHM	

⚠ : SAFETY PARTS

I.C.s

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	IC600	AN8806SB	I.C(M) MATSUSHITA	
	IC650	MN662720RB	I.C(DIGI-MO MATSUSHITA	
	IC700	BA6398FP	I.C(MONO-AN ROHM	
	IC720	VC4580L	I.C(MONO-AN DAINICHI	
	IC750	MN35503	I.C(DIGI-MO MATSUSHITA	
	IC751	NJM4580DD	I.C(MONO-AN DAINICHI	

⚠ : SAFETY PARTS

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	D751	1SS119	SI.DIODE	
	D752	1SS119	SI.DIODE	

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	C601	QETB1AM-107	100MF 10V AL E.CAPAC	
	C602	QCZ0202-155	1.5MF 25V CER.RESIST	
	C604	QETB1AM-107	100MF 10V AL E.CAPAC	
	C605	QER51VM-106	10MF 35V AL E.CAPAC	
	C606	QCHB1EZ-223	0.022MF 25V CER.CAPACI	
	C607	QCSB1HJ-680	68PF 50V CER.CAPACI	
	C608	QETB1HM-105	1MF 50V AL E.CAPAC	
	C609	QCBB1HK-101Y	100PF 50V CER.CAPACI	
	C610	QFLB1HJ-273	0.027MF 50V MYLAR CAPA	
	C611	QFLB1HJ-472	4700PF 50V MYLAR CAPA	
	C612	QFLB1HJ-332	3300PF 50V MYLAR CAPA	
	C613	QCT30CH-3R3Y	3.3PF 50V CER.CAPACI	
	C614	QFV81HJ-104	0.1MF 50V THIN FILM	
	C615	QCHB1EZ-223	0.022MF 25V CER.CAPACI	
	C616	QCHB1EZ-223	0.022MF 25V CER.CAPACI	
	C617	QCHB1EZ-223	0.022MF 25V CER.CAPACI	
	C618	QCXB1CM-222Y	2200PF 16V CER.CAPACI	
	C619	QCBB1HK-271Y	270PF 50V CER.CAPACI	
	C620	QCSB1HJ-470	47PF 50V CER.CAPACI	
	C621	QCBB1HK-821Y	820PF 50V CER.CAPACI	
	C622	QETB1AM-476	47MF 10V E.CAPACITO	
	C623	QFV81HJ-104	0.1MF 50V THIN FILM	
	C651	QFLB1HJ-471	470PF 50V MYLAR CAPA	
	C652	QCHB1EZ-223	0.022MF 25V CER.CAPACI	
	C653	QFLB1HJ-223	0.022MF 50V MYLAR CAPA	
	C654	QFLB1HJ-223	0.022MF 50V MYLAR CAPA	
	C655	QFV81HJ-334	0.33MF 50V TF.CAPACIT	
	C658	QFV81HJ-104	0.1MF 50V THIN FILM	
	C659	QETB1AM-107	100MF 10V AL E.CAPAC	
	C660	QFLB1HJ-223	0.022MF 50V MYLAR CAPA	
	C662	QFV81HJ-104	0.1MF 50V THIN FILM	
	C663	QETB1AM-107	100MF 10V AL E.CAPAC	
	C701	QETB1CM-227	220MF 16V AL E.CAPAC	
	C702	QCHB1EZ-223	0.022MF 25V CER.CAPACI	
	C703	QFLB1HJ-273	0.027MF 50V MYLAR CAPA	
	C704	QFLB1HJ-183	0.018MF 50V MYLAR CAPA	
	C706	QFLB1HJ-273	0.027MF 50V MYLAR CAPA	
	C720	QCHB1EZ-223	0.022MF 25V CER.CAPACI	
	C721	QCHB1EZ-223	0.022MF 25V CER.CAPACI	
	C722	QCS21HJ-101A	100PF 50V CER.CAPACI	C

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	C722	QCS21HJ-101A	100PF 50V CER.CAPACI	J
	C722	QCS21HJ-101A	100PF 50V CER.CAPACI	U
	C722	QCS21HJ-101A	100PF 50V CER.CAPACI	US
	C722	QCS21HJ-101A	100PF 50V CER.CAPACI	UT
	C731	QCF21HP-223A	0.022MF 50V CER.CAPACI	
	C732	QCHB1EZ-223	0.022MF 25V CER.CAPACI	
	C733	QCHB1EZ-223	0.022MF 25V CER.CAPACI	
	C735	QETC1HM-225ZN	2.2MF 50V AL E.CAPAC	
	C736	QETC1HM-225ZN	2.2MF 50V AL E.CAPAC	
	C751	QCZ0202-155	1.5MF 25V CER.RESIST	
	C752	QETB1AM-476	47MF 10V E.CAPACITO	
	C753	QCZ0202-155	1.5MF 25V CER.RESIST	
	C754	QCZ0202-155	1.5MF 25V CER.RESIST	
	C755	QETB0JM-227	220MF 6.3V E.CAPACITO	
	C756	QCZ0202-155	1.5MF 25V CER.RESIST	
	C757	EETB0JM-477E	470MF 6.3V E.CAPACITO	
	C758	QCT30CH-180Y	18PF 50V CER.CAPACI	
	C759	QCT30CH-180Y	18PF 50V CER.CAPACI	
	C768	QFLB1HJ-182	1800PF 50V MYLAR CAPA	
	C769	QFLB1HJ-182	1800PF 50V MYLAR CAPA	
	C770	QCS21HJ-101A	100PF 50V CER.CAPACI	
	C771	QCS21HJ-101A	100PF 50V CER.CAPACI	
	C772	QFLB1HJ-333	0.033MF 50V MYLAR CAPA	
	C773	QFLB1HJ-333	0.033MF 50V MYLAR CAPA	
	C774	EEZ2505-476	47MF AL E.CAPAC	
	C775	EEZ2505-476	47MF AL E.CAPAC	
	C776	QFLB1HJ-682	6800PF 50V MYLAR CAPA	
	C777	QFLB1HJ-682	6800PF 50V MYLAR CAPA	
	C778	EEZ2505-476	47MF AL E.CAPAC	
	C779	EEZ2505-476	47MF AL E.CAPAC	
	C780	QCZ0202-155	1.5MF 25V CER.RESIST	
	C781	QCZ0202-155	1.5MF 25V CER.RESIST	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	R602	QRD161J-123	12K 1/6W CARBON RES	
	R605	QRD167J-134	130K 1/6W CARBON RES	
	R607	QRD161J-913	91K 1/6W CARBON RES	
	R608	QRD161J-273	27K 1/6W CARBON RES	
	R609	QRD161J-114	110K 1/6W CARBON RES	
	R610	QRD167J-154	150K 1/6W CARBON RES	
	R611	QRD161J-394	390K 1/6W CARBON RES	
	R612	QRD161J-103	10K 1/6W CARBON RES	
	R613	QRD167J-121	120 1/6W CARBON RES	
	R614	QRD161J-470	47 1/6W CARBON RES	
	R615	QRD161J-470	47 1/6W CARBON RES	
	R616	QRD161J-470	47 1/6W CARBON RES	
	R617	QRD161J-2R2	2.2 1/6W CARBON RES	
	R618	QRD161J-910Y	91 1/6W CARBON RES	
	R651	QRD161J-102	1K 1/6W CARBON RES	
	R652	QRD161J-102	1K 1/6W CARBON RES	
	R653	QRD161J-102	1K 1/6W CARBON RES	
	R654	QRD161J-470	47 1/6W CARBON RES	
	R655	QRD167J-155	1.5M 1/6W CARBON RES	
	R656	QRD161J-104	100K 1/6W CARBON RES	
	R657	QRD161J-104	100K 1/6W CARBON RES	
	R658	QRD161J-681	680 1/6W CARBON RES	
	R659	QRD161J-124	120K 1/6W CARBON RES	
	R661	QRD161J-2R2	2.2 1/6W CARBON RES	
	R662	QRD161J-2R2	2.2 1/6W CARBON RES	
	R670	QRD161J-102	1K 1/6W CARBON RES	
	R671	QRD161J-102	1K 1/6W CARBON RES	
	R672	QRD161J-102	1K 1/6W CARBON RES	
	R673	QRD161J-472	4.7K 1/6W CARBON RES	
	R701	QRD161J-821	820 1/6W CARBON RES	
	R702	QRD167J-562	5.6K 1/6W CARBON RES	
	R703	QRD161J-112	1.1K 1/6W CARBON RES	
	R704	QRD167J-113	11K 1/6W CARBON RES	
	R706	QRD161J-124	120K 1/6W CARBON RES	
	R707	QRD167J-332	3.3K 1/6W CARBON RES	
	R708	QRD161J-752	7.5K 1/6W CARBON RES	
	R709	QRD167J-223	22K 1/6W CARBON RES	
	R710	QRD161J-392	3.9K 1/6W CARBON RES	
	R711	QRD167J-153	15K 1/6W CARBON RES	
	R712	QRD161J-752	7.5K 1/6W CARBON RES	
	R713	QRD167J-751	750 1/6W CARBON RES	
	R714	QRD161J-363	36K 1/6W CARBON RES	
	R716	QRD167J-151	150 1/6W CARBON RES	
	R723	QRD161J-243	24K 1/6W CARBON RES	
	R724	QRD161J-303Y	30K 1/6W CARBON RES	C
	R724	QRD161J-303Y	30K 1/6W CARBON RES	J
	R724	QRD161J-303Y	30K 1/6W CARBON RES	U
	R724	QRD161J-303Y	30K 1/6W CARBON RES	US
	R724	QRD161J-303Y	30K 1/6W CARBON RES	UT
	R725	QRD161J-133Y	13K 1/6W CARBON RES	
	R726	QRD167J-562	5.6K 1/6W CARBON RES	
	R727	QRD161J-183	18K 1/6W CARBON RES	
	R728	QRD161J-221	220 1/6W CARBON RES	C
	R728	QRD161J-221	220 1/6W CARBON RES	J
	R728	QRD161J-221	220 1/6W CARBON RES	U

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	R728	QRD161J-221	220 1/6W CARBON RES	US
	R728	QRD161J-221	220 1/6W CARBON RES	UT
	R730	QRD161J-363	36K 1/6W CARBON RES	
	R731	QRD167J-153	15K 1/6W CARBON RES	
	R732	QRD167J-153	15K 1/6W CARBON RES	
	R733	QRD161J-303Y	30K 1/6W CARBON RES	
	R736	QRD161J-363	36K 1/6W CARBON RES	
	R738	QRD161J-363	36K 1/6W CARBON RES	
	R739	QRD167J-751	750 1/6W CARBON RES	
	R740	QRD161J-102	1K 1/6W CARBON RES	
	R741	QRD161J-102	1K 1/6W CARBON RES	
	R743	QRD161J-102	1K 1/6W CARBON RES	
	R744	QRD161J-102	1K 1/6W CARBON RES	
	R745	QRD161J-102	1K 1/6W CARBON RES	
	R746	QRD161J-102	1K 1/6W CARBON RES	
	R751	QRD161J-101	100 1/6W CARBON RES	
	R752	QRD161J-102	1K 1/6W CARBON RES	
	R753	QRD167J-560	56 1/6W CARBON RES	
	R755	QRD161J-271	270 1/6W CARBON RES	
	R756	QRD161J-101	100 1/6W CARBON RES	
	R758	QRD161J-271	270 1/6W CARBON RES	C
	R758	QRD161J-271	270 1/6W CARBON RES	J
	R758	QRD161J-471	470 1/6W CARBON RES	U
	R758	QRD161J-471	470 1/6W CARBON RES	US
	R758	QRD161J-471	470 1/6W CARBON RES	UT
	R760	QRD161J-303Y	30K 1/6W CARBON RES	
	R761	QRD161J-303Y	30K 1/6W CARBON RES	
	R762	QRD161J-473	47K 1/6W CARBON RES	
	R763	QRD161J-473	47K 1/6W CARBON RES	
	R764	QRD161J-303Y	30K 1/6W CARBON RES	
	R765	QRD161J-303Y	30K 1/6W CARBON RES	
	R766	QRD161J-473	47K 1/6W CARBON RES	
	R767	QRD161J-473	47K 1/6W CARBON RES	
	R768	QRD161J-302	3K 1/6W CARBON RES	
	R769	QRD161J-302	3K 1/6W CARBON RES	
	R770	QRD167J-332	3.3K 1/6W CARBON RES	
	R771	QRD167J-332	3.3K 1/6W CARBON RES	
	R772	QRD167J-332	3.3K 1/6W CARBON RES	
	R773	QRD167J-332	3.3K 1/6W CARBON RES	
	R774	QRD161J-333	33K 1/6W CARBON RES	
	R775	QRD161J-333	33K 1/6W CARBON RES	
	R776	QRD161J-222	2.2K 1/6W CARBON RES	
	R777	QRD161J-222	2.2K 1/6W CARBON RES	
	R778	QRD161J-273	27K 1/6W CARBON RES	
	R779	QRD161J-273	27K 1/6W CARBON RES	
	R780	QRD161J-561	560 1/6W CARBON RES	
	R781	QRD161J-561	560 1/6W CARBON RES	
	R786	QRD161J-271	270 1/6W CARBON RES	
	R787	QRD161J-271	270 1/6W CARBON RES	

⚠ : SAFETY PARTS

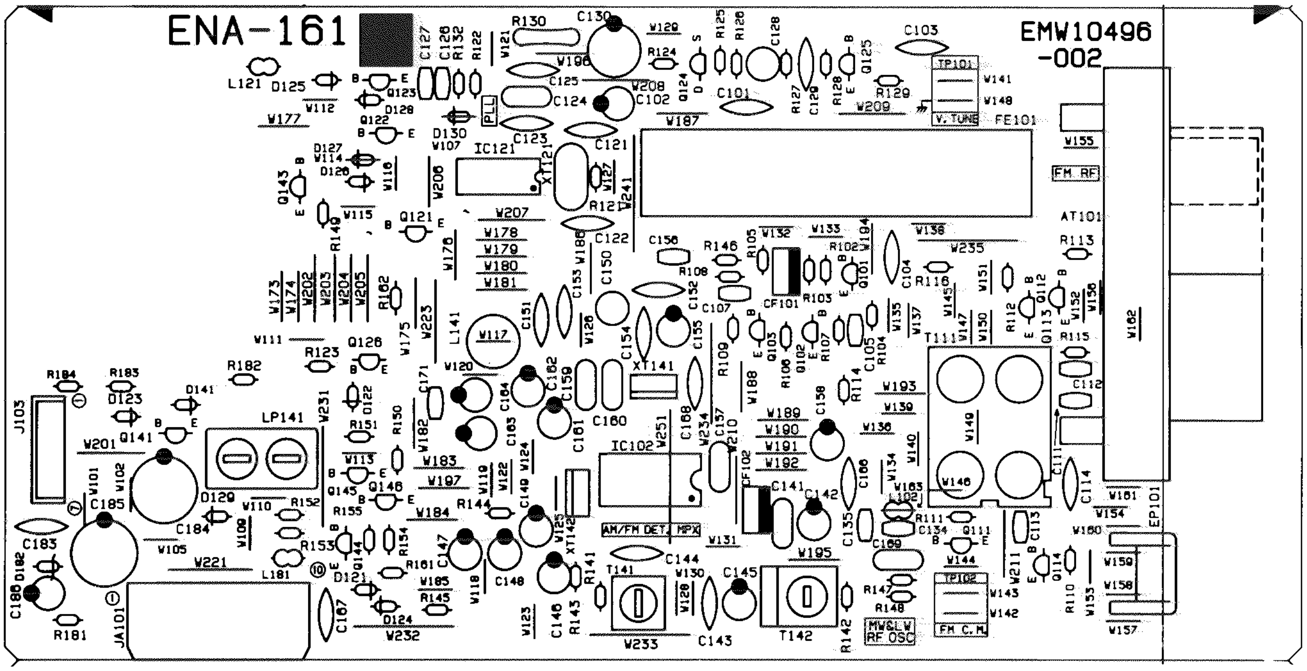
Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		EMW10499-002A	CIR.BOARD	
	K751	ENZ8101-007	INDUCTOR	
	P602	VMC0314-S12	CONNECT TER	
	P603	EMV7144-015R	CONNECT TER	
	BC604	EWS266-A408J	FLAT WIRE A	
	FS720	E3400-431	FELT SPACER	C
	FS720	E3400-431	FELT SPACER	J
	FS720	E3400-431	FELT SPACER	U
	FS720	E3400-431	FELT SPACER	US
	FS720	E3400-431	FELT SPACER	UT
	JA601	EMV7123-034	CONNECT TER	
	XT751	ECX0169-344KL	CRYSTAL	

⚠ : SAFETY PARTS

■ ENA-161 ☐ Tuner PC Board Ass'y

Note : ENA-161 ☐ varies according to the areas employed. See note (3) when placing an order.



Note (3)

PC Board Ass'y	Version	Designated Areas
ENA-161 A	C J	Canada the U.S.A.
ENA-161 G	U UT US	Universal Type Taiwan Singapore

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	Q101	2SC461	SI.TRANSIST	
	Q102	2SC535	SI.TRANSIST HITACHI	
	Q103	2SC461	SI.TRANSIST	
	Q121	DTA144ES	DIGITAL TRA ROHM	
	Q122	DTA144ES	DIGITAL TRA ROHM	
	Q124	2SK301(P,Q)	F.E.T.	
	Q125	2SC458(C,D)	SI.TRANSIST HITACHI	
	Q126	DTC114ES	DIGITAL TRA ROHM	
	Q141	DTC114ES	DIGITAL TRA ROHM	
	Q143	DTC114ES	DIGITAL TRA ROHM	

⚠ : SAFETY PARTS

I.C.s

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	IC102	LA1836M	I.C(MONO-AN SANYO	
	IC121	LC7218JMX	I.C(DIGI-MO SANYO	

⚠ : SAFETY PARTS

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	D121	1SS133	SI.DIODE ROHM	
	D122	1SS133	SI.DIODE ROHM	
	D123	1SS133	SI.DIODE ROHM	
	D124	1SS133	SI.DIODE ROHM	
	D126	1SS133	SI.DIODE ROHM	

⚠ : SAFETY PARTS

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	D129	1SS133	SI.DIODE ROHM	
	D130	1SS133	SI.DIODE ROHM	
	D141	1SS133	SI.DIODE ROHM	
	D182	MTZ5.1JC	ZENER DIODE ROHM	

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	C101	QCF21HP-103A	0.01MF 50V CER.CAPACI	
	C103	QCF21HP-223A	0.022MF 50V CER.CAPACI	
	C104	QCF21HP-223A	0.022MF 50V CER.CAPACI	
	C105	QCHB1EZ-223	0.022MF 25V CER.CAPACI	
	C107	QCHB1EZ-223	0.022MF 25V CER.CAPACI	
	C111	QCHB1EZ-223	0.022MF 25V CER.CAPACI	
	C112	QCT30CH-120Y	12PF 50V CER.CAPACI	
	C114	QCC21EM-473	0.047MF 25V CER.CAPACI	
	C121	QCS21HJ-180A	18PF 50V CER.CAPACI	
	C122	QCS21HJ-180A	18PF 50V CER.CAPACI	
	C123	QCC21EM-473	0.047MF 25V CER.CAPACI	
	C124	QCZ0202-155	1.5MF 25V CER.RESIST	
	C125	QCF21HP-223A	0.022MF 50V CER.CAPACI	
	C126	QCBB1HK-101Y	100PF 50V CER.CAPACI	
	C127	QCBB1HK-101Y	100PF 50V CER.CAPACI	
	C128	QENB1HM-474	0.47MF 50V NP E.CAPAC	
	C129	QCY31HK-102Z	1000PF 50V CER.CAPACI	
	C130	QETB1CM-227	220MF 16V AL E.CAPAC	
	C141	QFLB1HJ-473	0.047MF 50V MYLAR CAPA	
	C142	QETB1HM-106	10MF 50V E.CAPACITO	
	C143	QCF21HP-223A	0.022MF 50V CER.CAPACI	
	C144	QCC21EM-473	0.047MF 25V CER.CAPACI	
	C145	QETB1HM-475E	4.7MF 50V E.CAPACITO	
	C146	QETB1HM-106	10MF 50V E.CAPACITO	
	C147	QETB1HM-105	1MF 50V AL E.CAPAC	
	C148	QETB1HM-474	0.47MF 50V ELECTRO	
	C149	QETB1HM-105	1MF 50V AL E.CAPAC	
	C150	QETC1HM-225ZN	2.2MF 50V AL E.CAPAC	
	C153	QCY31HK-102Z	1000PF 50V CER.CAPACI	C
	C153	QCY31HK-102Z	1000PF 50V CER.CAPACI	J
	C153	QCY31HK-102Z	1000PF 50V CER.CAPACI	U
	C153	QCY31HK-102Z	1000PF 50V CER.CAPACI	US
	C153	QCY31HK-102Z	1000PF 50V CER.CAPACI	UT
	C154	QCY31HK-472Z	4700PF 50V CER.CAPACI	
	C155	QETB1EM-476	47MF 25V AL E.CAPAC	
	C156	QCHB1EZ-223	0.022MF 25V CER.CAPACI	
	C157	QCZ0202-155	1.5MF 25V CER.RESIST	
	C158	QETB1HM-106	10MF 50V E.CAPACITO	
	C159	QFLB1HJ-333	0.033MF 50V MYLAR CAPA	C
	C159	QFLB1HJ-333	0.033MF 50V MYLAR CAPA	J

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	C159	QFLB1HJ-333	0.033MF 50V MYLAR CAPA	U
	C159	QFLB1HJ-333	0.033MF 50V MYLAR CAPA	US
	C159	QFLB1HJ-333	0.033MF 50V MYLAR CAPA	UT
	C160	QFLB1HJ-333	0.033MF 50V MYLAR CAPA	C
	C160	QFLB1HJ-333	0.033MF 50V MYLAR CAPA	J
	C160	QFLB1HJ-333	0.033MF 50V MYLAR CAPA	U
	C160	QFLB1HJ-333	0.033MF 50V MYLAR CAPA	US
	C160	QFLB1HJ-333	0.033MF 50V MYLAR CAPA	UT
	C161	QETB1HM-225	2.2MF 50V AL E.CAPAC	
	C162	QETB1HM-225	2.2MF 50V AL E.CAPAC	
	C163	QETB1HM-225	2.2MF 50V AL E.CAPAC	
	C164	QETB1HM-225	2.2MF 50V AL E.CAPAC	
	C166	QCC21EM-473	0.047MF 25V CER.CAPACI	
	C168	QCC21EM-473	0.047MF 25V CER.CAPACI	
	C169	QFV81HJ-274	0.27MF 50V T.FILM CAP	
	C171	QCBB1HK-102Y	1000PF 50V CER.CAPACI	
	C183	QCF21HP-223A	0.022MF 50V CER.CAPACI	
	C184	QETB1CM-227	220MF 16V AL E.CAPAC	
	C185	QETB1CM-477M	470MF 16V E.CAPACITO	
	C186	QETB1HM-475E	4.7MF 50V E.CAPACITO	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	R102	QRD167J-332	3.3K 1/6W CARBON RES	
	R103	QRD161J-221	220 1/6W CARBON RES	
	R104	QRD167J-272	2.7K 1/6W CARBON RES	
	R105	QRD161J-391	390 1/6W CARBON RES	
	R106	QRD161J-102	1K 1/6W CARBON RES	
	R107	QRD161J-681	680 1/6W CARBON RES	
	R108	QRD167J-332	3.3K 1/6W CARBON RES	
	R109	QRD161J-221	220 1/6W CARBON RES	
	R114	QRD161J-103	10K 1/6W CARBON RES	
	R115	QRD161J-104	100K 1/6W CARBON RES	
	R116	QRD161J-222	2.2K 1/6W CARBON RES	
	R121	QRD161J-473	47K 1/6W CARBON RES	
	R122	QRD161J-472	4.7K 1/6W CARBON RES	
	R123	QRD167J-562	5.6K 1/6W CARBON RES	
	R124	QRD161J-222	2.2K 1/6W CARBON RES	
	R125	QRD161J-222	2.2K 1/6W CARBON RES	
	R126	QRD161J-181	180 1/6W CARBON RES	
	R127	QRD167J-822	8.2K 1/6W CARBON RES	
	R128	QRD161J-472	4.7K 1/6W CARBON RES	
	R129	QRD161J-222	2.2K 1/6W CARBON RES	
⚠	R130	QRD14CJ-680SX	68 1/4W UNF.CARBON	C
⚠	R130	QRD14CJ-680SX	68 1/4W UNF.CARBON	J
⚠	R130	QRZ0077-680	68 1/4W FUSIBLE RE	U
⚠	R130	QRZ0077-680	68 1/4W FUSIBLE RE	US
⚠	R130	QRZ0077-680	68 1/4W FUSIBLE RE	UT
	R132	QRD161J-102	1K 1/6W CARBON RES	
	R141	QRD161J-392	3.9K 1/6W CARBON RES	
	R142	QRD161J-103	10K 1/6W CARBON RES	
	R143	QRD161J-103	10K 1/6W CARBON RES	
	R144	QRD167J-332	3.3K 1/6W CARBON RES	
	R145	QRD161J-103	10K 1/6W CARBON RES	
	R146	QRD161J-222	2.2K 1/6W CARBON RES	C
	R146	QRD161J-222	2.2K 1/6W CARBON RES	J
	R146	QRD161J-222	2.2K 1/6W CARBON RES	U
	R146	QRD161J-222	2.2K 1/6W CARBON RES	US
	R146	QRD161J-222	2.2K 1/6W CARBON RES	UT
	R147	QRD161J-473	47K 1/6W CARBON RES	U
	R147	QRD161J-473	47K 1/6W CARBON RES	US
	R147	QRD161J-473	47K 1/6W CARBON RES	UT
	R147	QRD167J-223	22K 1/6W CARBON RES	C
	R147	QRD167J-223	22K 1/6W CARBON RES	J
	R148	QRD161J-561	560 1/6W CARBON RES	
	R149	QRD167J-223	22K 1/6W CARBON RES	C
	R149	QRD167J-223	22K 1/6W CARBON RES	J
	R149	QRD167J-223	22K 1/6W CARBON RES	U
	R149	QRD167J-223	22K 1/6W CARBON RES	US
	R149	QRD167J-223	22K 1/6W CARBON RES	UT
	R150	QRD167J-332	3.3K 1/6W CARBON RES	
	R151	QRD167J-332	3.3K 1/6W CARBON RES	
	R152	QRD167J-332	3.3K 1/6W CARBON RES	C
	R152	QRD167J-332	3.3K 1/6W CARBON RES	J
	R152	QRD167J-332	3.3K 1/6W CARBON RES	U
	R152	QRD167J-332	3.3K 1/6W CARBON RES	US
	R152	QRD167J-332	3.3K 1/6W CARBON RES	UT
	R153	QRD167J-332	3.3K 1/6W CARBON RES	C
	R153	QRD167J-332	3.3K 1/6W CARBON RES	J
	R153	QRD167J-332	3.3K 1/6W CARBON RES	U
	R153	QRD167J-332	3.3K 1/6W CARBON RES	US
	R153	QRD167J-332	3.3K 1/6W CARBON RES	UT
	R161	QRD161J-473	47K 1/6W CARBON RES	
	R162	QRD161J-222	2.2K 1/6W CARBON RES	
	R181	QRD161J-222	2.2K 1/6W CARBON RES	
	R182	QRD161J-103	10K 1/6W CARBON RES	
	R183	QRD161J-103	10K 1/6W CARBON RES	
	R184	QRD161J-103	10K 1/6W CARBON RES	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	R184	QRD161J-473	47K 1/6W CARBON RES	C
	R184	QRD161J-473	47K 1/6W CARBON RES	J
	R184	QRD161J-473	47K 1/6W CARBON RES	U
	R184	QRD161J-473	47K 1/6W CARBON RES	US
	R184	QRD161J-473	47K 1/6W CARBON RES	UT

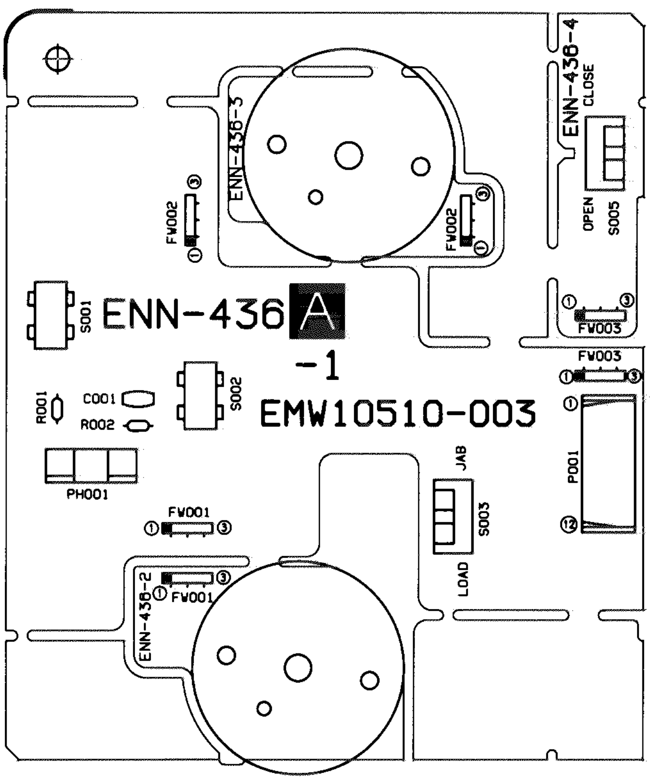
⚠ : SAFETY PARTS

Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		EMW10496-002A	CIR.BOARD	C
		EMW10496-002A	CIR.BOARD	J
		EMW10496-002A	CIR.BOARD	U
		EMW10496-002A	CIR.BOARD	US
		EMW10496-002A	CIR.BOARD	UT
		E308963-001	SHIELD BRAC	
	J103	EMV5109-007A	MALE CONNEC	
	L121	EQL4004-1R0	INDUCTOR	
	L181	EQL4004-1R0	INDUCTOR	
	T111	EQR7121-004	RF COIL	C
	T111	EQR7121-004	RF COIL	J
	T111	EQR7121-004	RF COIL	U
	T111	EQR7121-004	RF COIL	US
	T111	EQR7121-004	RF COIL	UT
	T141	EQT2140-021	I.F.TRANSFO	
	T142	ECB1560-010	CERAMIC FIL	
	AT101	EMB41YV-302K	ANTENNA TER	
	CF101	ECB2123-006R	CERAMIC FIL	C
	CF101	ECB2123-006R	CERAMIC FIL	J
	CF101	ECB2123-006R	CERAMIC FIL	U
	CF101	ECB2123-006R	CERAMIC FIL	US
	CF101	ECB2123-006R	CERAMIC FIL	UT
	CF102	ECB2123-006R	CERAMIC FIL	C
	CF102	ECB2123-006R	CERAMIC FIL	J
	CF102	ECB2123-006R	CERAMIC FIL	U
	CF102	ECB2123-006R	CERAMIC FIL	US
	CF102	ECB2123-006R	CERAMIC FIL	UT
	EP101	E70225-001	EARTH PLATE	
	FE101	EAF2203-004	FRONT END	C
	FE101	EAF2203-004	FRONT END	J
	FE101	EAF2203-004	FRONT END	U
	FE101	EAF2203-004	FRONT END	US
	FE101	EAF2203-004	FRONT END	UT
	JA101	EMV7140-L10R	PIN CONNECT	
	LP141	EQF0101-002	LOWPASS FIL	
	XT121	ECX0007-200KWJ1	CRYSTAL	
	XT141	ECXPR46-001A	CRYSTAL	
	XT142	ECB1001-002	CERAMIC FIL	

⚠ : SAFETY PARTS

■ ENN-436 A CD Changer PC Board Ass'y


ENN-436-4
CLOSE
OPEN
S005
ENN-436-3
FW002
FW002
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③
FW003
S001
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R001
C001
R002
S002
FW003
P001
①
⑫
PH001
FW001
JAB
S003
LOAD
ENN-436-2
FW001

Capacitor

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	C001	QCHB1EZ-223	0.022MF 25V CER.CAPACI	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	R001	QRD161J-331	330 1/6W CARBON RES	
	R002	QRD161J-472	4.7K 1/6W CARBON RES	

⚠ : SAFETY PARTS

Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		EMW10510-002A	CIR.BOARD	
	P001	EMV5132-012R	CONNECT TER	
	S001	QSEC001-E03	LEVER SWITC **MAG. IN SW**	
	S002	QSEC001-E03	LEVER SWITC **HOM. POJ. SW**	
	S003	ESS1200-002	LEVER SWITC **LOAD/JAB SW**	
	S005	ESS1200-002	LEVER SWITC **OPEN/CLOSE SW**	
	FW001	EWR33B-08SST	FLAT WIRE A	
	FW002	EWR33B-08SST	FLAT WIRE A	
	FW003	EWR33B-13SST	FLAT WIRE A	
	PH001	GP1A53HR	I.C(PHOTO-I	

⚠ : SAFETY PARTS

—MEMO—

Accessories List

Symbol No. M 6 M M

⚠	Item	Part Number	Part Name	Q'ty	Description	Area
	1	E30580-2223A	INSTRUCTION BOOK	1		J
		E30580-2224A	INSTRUCTION BOOK	1		C
		E30580-2225A	INSTRUCTION BOOK	1		U,US,UT
	2	E43486-519A	CAUTION SHEET	1		
	3	BT-51006-1	WARRANTY CARD	1		J
		BT-20025M	WARRANTY CARD	1		C
	4	BT-20044G	SAFETY INST	1		J
	5	BT-20071B	SVC CENTER LIST	1		C
⚠	6	ENZ2202-001	SIEMENS PLUG	1		US
⚠		ENZ2203-001	SIEMENS PLUG	1		U,UT
	7	QPGA025-03505	ENVELOPE	1		Except BS
		QPGA025-03505	ENVELOPE	1		BS
	8	EWPZ01-005	GND WIRE	1		
	9	EQB4001-015J2	AM LOOOP ANTENNA	1		
	10	E03614-004	B.IN ANTENNA	1		
	11	EMZ2001-014	ADAPTER	1		
	12	R03BPA-2STSA	BATTERY	1		
	13	RM-SEC550U	WIRELESS REMOTE CONTROLLER	1		
	14	E26072-020	MAGAZINE UNIT	1		

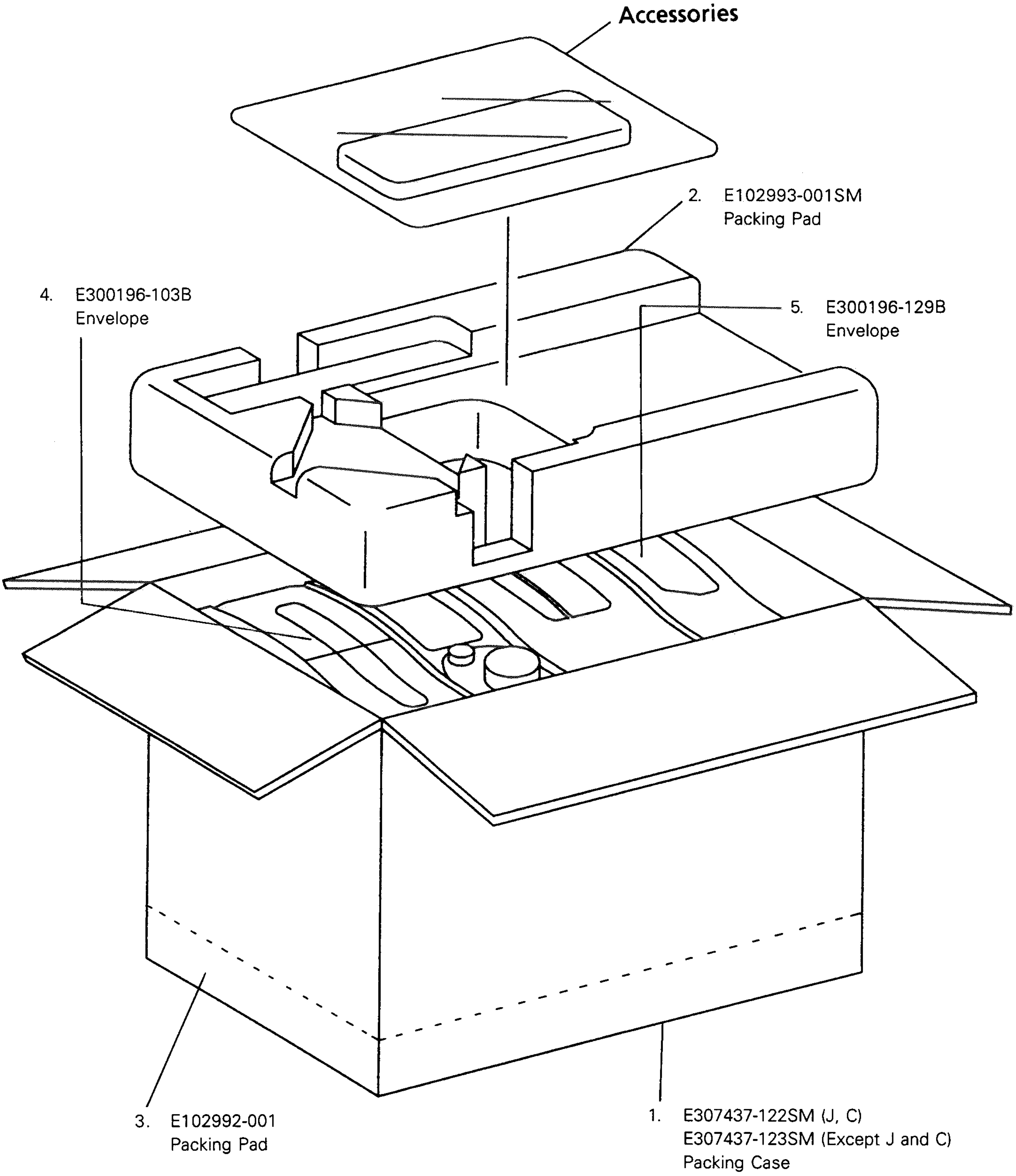
⚠ : Safety Parts

The Marks for Designated Areas

C ..... Canada
US .... Singapore
J .... the U.S.A.
UT .... Taiwan
U .... Universal Type
No mark indicates all area.

Packing Materials and Part Numbers

Symbol No. M 7 M M


Accessories
2. E102993-001SM
Packing Pad
4. E300196-103B
Envelope
5. E300196-129B
Envelope
3. E102992-001
Packing Pad
1. E307437-122SM (J, C)
E307437-123SM (Except J and C)
Packing Case

VICTOR COMPANY OF JAPAN, LIMITED
AUDIO DIVISION, YAMATO PLANT, 1644, SHIMOTSURUMA, YAMATO-SHI, KANAGAWA-KEN, 242, JAPAN

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